

Integrative Medicine

- Exploring a New System Methodology

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Abstract

Medicine is facing an era of transformation. Evidence Based Medicine (EBM) is being challenged by the revival of traditional medicines such as Chinese medicine and Complementary & Alternative Medicine (CAM) from a holistic natural stand point. The proposal of an integrative medicine must begin by innovating a creditable theoretical methodology to guide its clinical practice. This inquiry looks at the logic of cognition, a progression from evidence, scientism and the holistic metaphysics of medicine to a truer, more coherent methodology. Exploring this progress in terms of the dialectical logic of synthesis, this paper proposes the theoretical advancement of a Dialectical Based Medicine (DBM). Syllogism in Hegel's science of logic may provide us with a cognitive logic for integrative medical research that incorporates both the changing complexity of physical manifestations and psycho-emotional, social and environmental factors in human health and disease.

The progressivism of DBM in terms of future medical research contents and global perspective of medicine are also considered in this report.

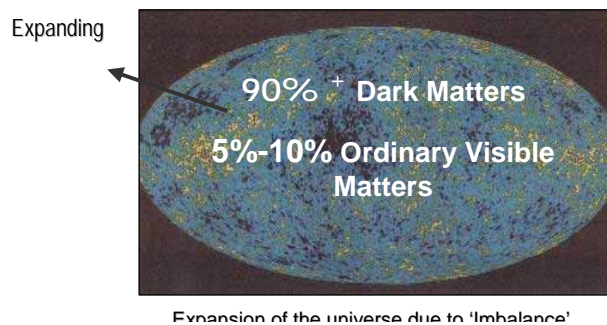
Keywords:

Medical Methodology; Integrative Medicine; Dialectical Based Medicine (DBM); Evidence Based Medicine (EBM); Traditional Holistic Medicine; Hegelian Dialectics; Progressivism; Analytic Cognition; Synthetic Cognition; Syllogism; Medical Research; Clinical Practice; Scientism; Metaphysics.

Prologue

In the beginning, human civilisations evolved their own indigenous medicine to care for the health of their people. Traditional medicines of different cultures have gradually given way to the rise of Modern Scientific Medicine during the past two centuries or so. From the thoughts of Descartes, Kant and Hegel, to the

more recent scientific thinkers such as Newton, Einstein and Karl Popper, science has become the undisputable dominant form of knowledge in our time. The world thus becomes more and more scientific and technological. Stephen Hawking's discovery of the black hole and the recent excursion into mapping of the expanding universe in terms of dark matters and visible positive matters indicate that the current body of scientific knowledge and scientific methodology are insufficient to understand the changing universe that unites the visible and the invisible which is beyond physical evidence. Astro-physicists are now investigating the existence of an anti-universe to illustrate the trend that our greatest intellect is going beyond one-dimensional physical evidence. This view is now also extended to the parameters of theoretical medicine in dealing with the complexities of human health and changing patterns of diseases. Hegel, in his 'Science of Logic' said 'becoming' transforms 'Being' and 'nothing' into a new unity of thought because thought is always in contact with and trying to understand a changing world.



Cognition in terms of analytic evidence and synthetic dialectics

The debate on the theoretical medicine of the future is not confined to evidence based and holistic based or the traditional natural medicinal approach contrasted with modern drug based medicine. Indeed any medicine

that produced clinical efficacy in the end can be proved scientific because it cures the patient. For instance, Chinese Medicine will in the end be proven scientifically since it cured many billions of people throughout the past few thousand years.

The point, however, is for us to progress with the next stage of theoretical medicine beyond the science of physical evidence. Medicine must enter the next stage to comprehend the human being beyond the total sum of his parts. According to Hegel, "Cognition proceeds from the known to the unknown", Hegelian logic of cognition (the idea of the true) described the present dilemma facing medicine. In terms of our future medicine, both 'analytic Cognition' and 'Synthetic Cognition' are required to complete the "syllogism" of cognition.

In Hegel's logic of science he insisted analytic (scientific) processes of cognition are "The activity of the subjective notion [and] must be regarded from one side merely as the explication of what is already in the object". This cognition is then counteracted by his statement that, "Synthetic cognition aims at the comprehension of what is, that is, at grasping the multiplicity of determination in their unity. It is therefore the second premise of the syllogism in which the diverse as such is related."

In this dialectical progressivism towards truer knowledge, medicine may progress to understand human health and illness beyond the physical manifestation. Both theoretically and clinically we may be guided eventually to the truth about medicine, an integrated body of knowledge that is reflecting a coherent body of relationships within a human being.

Significance of Modern Scientific Advancement to Dialectical Based Medicine

Max Planck unveiled his 'Quantum Theory' in 1900 positing that 'energy' is not measured in terms of continuous flow of matters but in 'Quanta'. Albert Einstein later published his work 'On the Electrodynamics of Moving Bodies' and a few month later in 1905 revealed his famous equation on energy (' $E=MC^2$ '). By pure intellect he turned science upside down with his theory of relativity. When we apply the Einsteinian concept of energy to medicine, we can confirm that the human body contains a huge amount of potential

energy (7×10^{18} joules approx). The liberation of this energy and its inner interactions within the body provide a pattern of change in health and disease. The idea given in Einstein's 'Cosmological Considerations on the General Theory of Relativity' (1917) also confirms in scientific terms Hegel's dialectical logic. Further discovery on 'Dark Matters' vs. 'Visible Ordinary Matters' in the latest mapping of the universe and its expansion due to an imbalance of the two kinds of matters confirms the dialectic notion of contradiction within the unity of the opposite. The Chinese applied this concept to medicine in the theory of Yin and Yang.



$E=MC^2$
Speed of light = 299,792,458 metre per second
Energy of the universe = it Mass (above) X speed of light
time itself

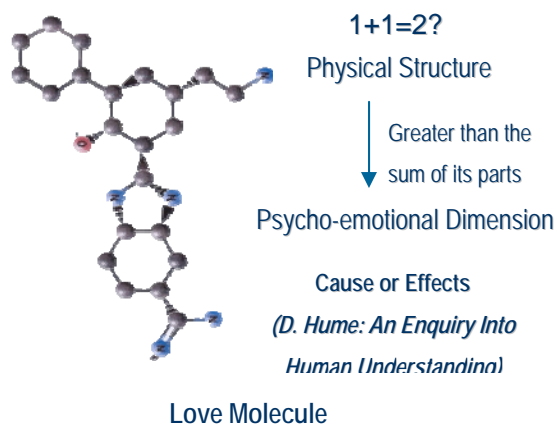
What is the energy of the human body?

Qi (Energy) is divided into Yin (dark) and Yang (bright) and the imbalance of which causes changes in the body. Evidence of change in micro-qi (energy) may make little difference to the doctor, but it is a matter of consequence to the patient in his little universe within the body. Einstein's theory of relativity of energy, mass, speed, time and space, infers the same view on the relativity of energy and matters in the patterns of change within the human body. Dialectical Based Medicine enriched by the contents of future research may yet turn medicine upside down. The Hegelian notion of cognitive progressivism may point to the new dimension of relativity in medical thinking.

Dialectic Progressivism in Medicine

What is to be done with the existing opposing views of medicine? We may look at traditional medicine and CAM as the 'thesis' and scientific based medicine as the 'anti-thesis', and therefore apriori according to the dialectical progressivism concept of 'becoming', integrative medicine should be the 'synthesis'. Thus the cognitive methodology of integrative medicine must be

dialectical in character to achieve a cognitive syllogism. Since the very point of medicine is to cure the patient, preventing him from the inevitable end of physical existence as long as we can and maintain the quality of being while he is alive, clinical medicine must be guided by a methodology that takes into account not only the physical aspects but also the changing relationship of the human body to complex psycho-emotional and environmental factors. With the reality we face in developing medical thinking today, we can benefit from taking into account the intellectual direction given by Hegel. "The progress, proper to the notion, from universal to particular, is the basis and the possibility of a synthetic science, of a system and of systematic cognition" (Hegel's science of logic). Such qualitative cognition forms the basis of a 'Dialectical Based Medicine (DBM)' which should be the methodology of our future integrative approach in medicine.



DBM and Clinical Application

How then do we apply the guiding principles of dialectic logic to the clinical practice of medicine? By combining the traditional holistic medicine with EBM, we can now have the opportunity to look at both sides of the coin to compare and interact in order to enhance positivities and negate falsities. We look at physiology and pathology in a fuller picture of change that is relational to the whole human body and its environment. We now realise the value of the coin not only in its metallic quality but also its value in social terms. DBM provides this synergy in medicine that necessitates integration, not only in an academic and clinical sense but also in terms of a global perspective.

John Stuart Mill said, "Belief or bodies of knowledge lose vitality and stagnate if not regularly challenged to be improved". In the passage of time, a process of change in our practice of medicine, many forces negate and at the same time transform each other within the theoretical guiding principles and etiology of medicine. Dialectics describes this process in the progressivism of the law of the 'unity of the opposites', similar to the law of change within the Yin and Yang concept of body balance and transformation in Chinese Medicine. DBM thus provides medicine with a better, truer or more resilient methodology for clinical practice. It is therefore natural for Integrative Medicine to adopt such methodology. In fact this adoption cements the global content of medicine with acceptance from both Eastern and Western medical circles inductive to further East-West encounters to complete the synthesis of a global transformation – and inevitable trend of our time.

DBM and International Healthcare Problems

The current links of diseases to lifestyle and commutable diseases such as Bird Flu, SARS, AIDS and Malaria are serious problems due to the fast pace of globalisation. Primary care is increasingly turning to preventative medicine and lifestyle medicine for solutions to the mounting health problems and healthcare costs. If international co-operation is necessary, then medicine must evolve an internationally accepted methodology for integrative medicine on which future clinical practice will be based. A globalised medicine without frontiers is upon us; DBM will serve to unite all the diversities of medicine for a multicultural integration.

DBM and Medical Research

To validate DBM as a progression from holistic based and evidence based medicine, we need to conduct a vast range of medical research designed on this model. The medical horizon can be expanded with protocols that include RCT, syndrome patterns of holistic medicine and DBM synthesis for clinical trials. These trials can be supervised by an international ethics committee with experts from orthodox, traditional and integrative medical circles. Before such research initiatives, we have to consider the protocols of DBM and refine it with further studies.

Research Directions for DBM – a suggestion:

1. Clinical trial model – beyond RCT including mind, emotion medicine and Placebo effects.
2. Bio-medicine research and development of models based on environmentally friendly approaches to plant based molecules.
3. Research in medical synergy – considering basic concepts such as Qi, energy, Yin and Yang concept of the unity of the opposites:
 - 1) *in the body (cell kinetics).*
 - 2) *in human physiology (disease and balance).*
 - 3) *organ functions (the holistic relationship from the view of EBM & DBM).*
 - 4) *psycho-emotional influences on the physiology (synthesis of EBM with DBM).*
 - 5) *electro-magnetic system of the body and its relation to physiology, electro-magnetic energy, inter- space between physical and mental medicine.*
 - 6) *Green medicine – impacts of environmental and social factors to physiology and vice-versa. Advance the research of System Biology to provide a basis for a complex plant based medicine.*
 - 7) *Lifestyle medicine – practical research on preventative medicine – including considerations of work, consumption and leisure impacts on the physiology.*
 - 8) *Holistic – DBM approach to medical physics, health screening, and patterns of disease detection.*
 - 9) *The impact of democratisation of technology and material economism on human health (DBM approach to include psycho-emotional–spiritual medicine).*
 - 10) *Globalised system of collaborative social medicine to cope with the spread of commutable diseases.*

Epilogue

The debate in the future of medicine should ascend to the next level. Neither scientism nor metaphysics can explain each other's fallacy. The issue now is not whether Chinese medicine or traditional medicine is scientific or not, but in determining the next development of medical thought beyond EBM. Evidence will be judged on how a medicine can better treat a patient without causing harm. The current

side effects vs. benefits ratio of drugs and risks vs. benefits ratio of surgery are too high towards risks to be acceptable to the future sophisticated population. We need a new methodology to take us to the next level in medical development. DBM incorporates both the scientific rationale and holism in medicine to transform us onto a new horizon.

In considering the future development of medicine, the integrative approach must incorporate the notion that “medicine is not an isolated speciality – but an integrated part of the activities of man in this complex changing universe in which man struggles socially, economically, materially, spiritually to exist in the hope that his cognition will eventually arrive at the point to realise the true meaning of his existence”. Medicine will fail in the end to keep a man alive forever, therefore the ultimate aim of medicine is to enhance his existence and his comprehension of it. If science is concerned with facts only, then medicine must go beyond science since man's consciousness is beyond the dimension of facts. This “Cognition beyond science” perhaps is a new body of knowledge in the creation. In the history of human existence, knowledge is constantly evolving. New ideas always challenge the current prevailing conceptual system, since today's innovation will be tomorrow's orthodoxy.

**Note: Propositions contained in this report will be expanded in the current work engaged in by Prof. M. F. Mei's 'Treatise of Dialectical Based Medicine – Relational Approach to Medical Cognition and Practice'.*

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