

Towards Quantum Biology : The Ayurvedic Perspective

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Ayurveda is one of the oldest life and health sciences of the world, its antiquity going back to the ancient Vedas. Ayurveda has its own biology, pathology, diagnostics and materia medica evolved out of serious considerations of the continuum of the individual and the universe – “*Yatha loke tatha pinde*” described elaborately in its classic texts. Ayurveda is essentially a pronature, holistic and individualized health care system which is strikingly different than the conventional western biology and medicine. Ayurvedic biology at large is based on its own three dimensional consideration integrating body, mind and the spirit in one sweep – “*Sattwaatma Shariram Ca Trayam Etat Tridandawat*”.^[1,6,10-12] Such a consideration makes this science very unique and very different than the conventional modern biology. Because of this fact often one finds it difficult to undertake a comparative study between the two sciences attempting to give any counterpart interpretation which if attempted without due care leads to erroneous conclusions and bilateral conceptual distortions. Hence it is largely felt that there is a need to develop new approach and new methodology to study Ayurveda “as it is” of course using scientific tools to be developed specially for this purpose.

It would be seen that the modern understanding of biology has been changing its face in recent years ranging from gross organic biology to molecular biology and further back to systems biology. It seems conventional western biology and biomedical sciences still follow the principles of classical Newtonian physics which has become obsolete in some of its major aspects after the advent of new modern

physics after the work of Albert Einstein and his theory of general Relativity and Quantum mechanics. Quantum physics, Nano-science and united field theories display a new canvas of scientific thinking warranting quick adoption of real modern physics by the biosciences and medicine which has not yet been done.

It is felt by many that closer comparisons may reveal that Ayurvedic biology matches more logically with quantum physics theory than with classical physics approaches. Conventional biology works largely in a structure dominated approach with emphasis on narrow structure-function relationship and cause-effect duality. In contrast Ayurvedic biology prefers to adopt a broad holistic approach irrespective of narrow cause-effect relationship. Similarly subjective observation is an important dimension of knowledge in oriental sciences in contrast to western science where the very basic premise is adopted to reduce the “Reality” into a tentative formula which may be measured objectively. However as pointed out by Nobel laureate Jacobson^[4] it cannot be over emphasized that the “Reality” is so complex that it cannot be reduced in such a manner and hence the reductionist approach of science is questioned.

Thus the reductionist approach is not a realistic approach to know the whole truth. Unfortunately because of the lack of appropriate methodology most investigators in biosciences adopt the reductionist approach and claim that this is the only approach which is scientific and rest of everything is unscientific. This crisis of confidence in

scientific investigation is a great hurdle in the real growth of contemporary biosciences. This issue is found more glaring in case of modern researches in oriental sciences such as Ayurveda which are more akin to quantum science warranting newer innovative methods of study.

The basic tenets of Ayurvedic physiology comprise of the theories of *Triguna*, *Tanmatra*, *Panchmahabhuta*, *Tridosha*, *Saptadhatu*, *Ojas*, *Agni*, *Ama* and *Srotas* which constitute a unique holistic model of biology very different from the conventional biology based on its organ-system structure-function relationship. It is imperative to examine the laws of the genesis of these two fundamentally different approaches to the understanding of the same body-mind system.^[2-5,7-8] To my mind this diversity is fundamental and is related to the very nature the “Reality”.

Often a question is raised as why the classical Ayurvedic schools projected the new theory of *Tridosha-Vata-Pitta-Kapha* in spite of the possibility that structure-function of the physical body was not difficult to be explained through the already existing *Panchamahabhuta* theory which existed since Vedic period. Many scholars believe that *Tridosha* doctrine is the biological derivation of the *Panchamahabhuta* theory for easier understanding of the *Prakriti-Vikriti* patterns of the living body-mind system. Many wonder what actually is the entity of the three *Doshas*. Are they structural entities or are merely a set of basic functions, or they are materials or are energies or they are nothing (neither structure nor function) rather they just dictate a theoretic formula to explain the physiology of an individual in life time in a holistic way. Some critical observers ask a question how the three *Doshas* are physically and physiologically separate from the seven *Dhatus*, thirteen *Agnis* and innumerable *Srotamsi*. I am inclined to suggest that if each one of the seven *Dhatus* are separated from the body what remains behind is the energetic life process ie the *Prana* which is the coordinating force for all structural and functional attributes in a quantum manner. In living body nothing is separate from

anything. Everything is the integral part of the organism. This is the quantum basis of the understanding of *Ayurvediya Kriya Sharira*.

With a similar perspective the Ayurvedic classics describe three different streams of cure namely – 1. *Daiva vyapasraya chikitsa*, 2. *Yukti vyapasraya chikitsa* and 3. *Sattvavajaya chikitsa* laying the foundation for the practice of quantum healing through *Dravyabhuta* and *Adravyabhuta chikitsa*. The *Daivavyapasraya chikitsa* is not simply a religious act, It essentially refers to quantum healing process. Understanding of quantum healing is not difficult to perceive if one perceives the body-mind-spirit system in continuum of the cosmic reality with quantum logic. This age-old doctrine of life seems to have been negated by the Darwin’s theory of evolution which itself is still under debate. Sir John Eccles Nobel laureate in medicine and physiology comments “But the conscious self is not in the Darwinian evolutionary process at all. I think it is a divine creation.” Nobel laureate BD Jacobson has also emphasized the significance of subjective observation for understanding the Reality as opposed to the conventional emphasis on mere objective observation in biomedical research.

The oriental sciences have been emphasizing on the role of cosmic consciousness in the creation of the universe. In the words of Vedant the universe is essentially an ocean of consciousness/cosmic energy where everything is connected with each other and nothing is discrete which forms the basis of the concept of *Atman-Brahman* continuum. This is the essence of quantum relationship and is highly dynamic. The recent emphasis on genome-epigenome continuum and the united field theories of modern physics are substantially in support of Quantum biology and quantum healing proposed in oriental schools of thought Vedanta and Ayurveda. Systems biology and the proposed quantum biology are the two faces of the same coin which forms the basic matrix of the dynamic holistic understanding of life.

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