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MEDICAL PLURALISM – THE CHALLENGES AHEAD

G. G. GANGADHARAN[1] AND DARSHAN SHANKAR[2]

Foundation for Revitalisation of Local Health Traditions,
74/2 Jarakabande Kaval, Attur Post, Bangalore-560 064 (India)

Abstract: Traditional medicine in India has two streams, folk medicine and codified traditional medicines like Ayurveda, Unani, Siddha and Tibetan Gso-rig-pa. They have strong theoretical foundations and are documented in hundreds of medical manuscripts. The codified system consists of medical knowledge expressed in thousand of regional manuscripts covering all branches of medicine and surgery. The ecosystem specific approach of traditional system of medicines can enable other cultures to identify their natural resources and use it for their health care needs. If the need for supporting medical pluralism is appreciated and work towards this is initiated, traditional medicine will be able to contribute to frontiers of medicine.

Keywords: Conventional medicine, Folk medicine, Codified traditional medicine, Ayurveda, Siddha, Unani and Tibetan systems of medicine, Medical pluralism.

This debate has to take place in an environment of positive thinking, openness to understand diverse knowledge systems and a felt need to look for better option to fill the gaps of conventional medicine and above all the importance of taking health care to the cross section of the community which is affordable and effective.

Traditional medicine in India has two streams. Folk medicine: This is diverse, eco-system and ethnic community specific. An oral tradition purely empirical in nature that exists in all rural communities throughout the length and breadth of India.

According to the Anthropological Survey of India, there are 4,639 ethnic communities in India. Except for scattered documentation by anthropologists of the ethno medical traditions of many tribal, and fewer non-tribal communities in different regions, no complete documentation has been made of the entire spectrum of folk medicine streams of India. Thus the knowledge base and potential of this stream has not yet been fully understood. The ethno botanical resources used in the tradition are ecosystem specific and the local cultural diversity has a direct relationship with the local bio-diversity. This relationship has been recognized and encouraged in indigenous medical texts like **Ashtanga Sangraham**[1].

"Uchitho yasya yo desa tajjam tasyaushadham hitham, Desenyathrapi vasatho thattulya guna karma cha".

Means: "*Nature is so benevolently organized that it has provided every micro-environment, the natural resources (in the form of plants, animals and minerals) necessary for the typical health needs of the people living in that environment*".

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[1]Joint Director and [2]Director

A striking example of this eco-system linkage is seen in the case of the plant *Ephedra vulgaris* that is only found in Tran Himalayan habitats. This plant has broncho-dilatory properties and local people traditionally drink an herbal tea made of the plant several times a day. The tea helps in easy breathing in the rarified atmosphere of the Tran Himalayas.

One also comes across startling examples of the incredible depth and range of the Ayurvedic tradition in stray reports.

For instance, in 1793, two medical officers of East India Company – Jame Finlay and Thomas Cruso – reported on the practice of rhinoplasty by a potter's community in Pune district in the Madras Gazette (and later in 1794 in the London Gentleman's Magazine). It was this technical report that led to further developments in Britain plastic surgery of the nose[(2)].

An American Nobel Prize winner, Dr.Barooch Bloomberg has studied the efficacy of the folk remedy using *Phyllanthus amarus* for treatment of Hepatitis B & C. He visited South India, to study this plant[(3)].

The codified stream like Ayurveda, Siddha and Tibetan Gso-rig-pa consists of medical knowledge with sophisticated theoretical foundations expressed in thousands of regional manuscripts covering treaties on all branches of medicine and surgery.

However, of an estimated 100,000 medical manuscripts lying in oriental libraries and private collections in India and abroad, less than one percent is available for current use by students and teachers in India's medical schools. The earliest Ayurvedic texts, the Sushruta Samhita and Charaka Samhita are believed to have been written between 1500 and 1000 BC[(4)].

- Respiratory Disorders like Asthma and Bronchitis, Cardio vascular Disorders like Coronary blocks, TAO and DVT: Ophthalmic conditions like early stages of DR (Diabetic Retinopathy) and RP (Retinitis Pigmentosa) and certain stages of Glaucoma; Orthopedic conditions like congenital clubfoot and Osteoporosis in women. Metabolic disorders like RA (Rheumatoid Arthritis), Degenerative diseases like early stages of Amnesia, Parkinson's disease, OA (Osteo arthritis), Conditions of GIT, Skin diseases, Mental Health are the areas of clinical competence of Ayurveda.

Demographic Transition

The 20th century revolution in health and the consequent demographic transition – lead inexorably to major changes in the pattern of disease. As a result of the epidemiological transition the distribution of causes of death in 1999 differs markedly from the distribution of causes of death in 1909. Not only have the major causes of death changed, but also the average age of death has been steadily rising. The resulting new epidemics of non-communicable diseases and injuries challenge the finances and capacities of health systems.

Double Burden of Diseases[(5)]

Health policy-makers in the early decades of the 21st century will thus need to address a double burden of disease. The emerging epidemics of non-communicable diseases and injuries and some major infectious diseases which survived the 20th century – part of the unfinished health agenda.

The next two decades will see dramatic changes in the health needs of the world's population. In the developing regions, non-communicable diseases such as depression and heart disease are fast replacing the traditional enemies, in particular infectious diseases and malnutrition, as the leading causes of disability and premature death. The disease burden resulting from depression is estimated to be increasing both in developing and developed regions. Alcohol use is also quantified as a major cause of disease burden, particularly for adult men. It is the leading cause for disability for men in the developed regions and fourth leading cause in the developing regions. It has been estimated that ischaemic heart disease will be the largest single cause of disease burden globally by the year 2020.

The third largest cause of disease burden within non-communicable conditions is cancer. Cancers are responsible for a large proportion of years of life lost and years lived with disability.

Among cancers, the most significant cause of disease burden is lung cancer, which is projected to become even more prevalent over the next few decades, if current smoking trends continue. Tobacco is a major risk factor for several other non-communicable diseases as well.

Non-communicable diseases are expected to account for an increasing share of disease burden, rising from 43% in 1998 to 73% by 2020, assuming a continuation of recent downward trends in overall mortality.

The expected increase is likely to be particularly rapid in developing countries. In India, deaths from non communicable causes are projected to almost double from about 4.5million in 1998 to about 8 million a year in 2020.

The steep projected increase in the burden of non-communicable diseases worldwide – the epidemiological transition – is largely driven by population ageing, augmented by the rapidly increasing numbers of people who are at present exposed to tobacco and other risk factors, such as obesity, physical inactivity and heavy alcohol consumption. This increase in non-communicable diseases included by changes in age distribution poses significant problems. Health systems must adjust to deal effectively and efficiently with the globally changing nature of illness.

Health policy-makers will be challenged to find the most cost-effective uses with their limited resources to control the rising epidemics of non-communicable diseases.

In contrast to the limited number of conditions responsible for most of the excess disease burden among the poor, policy-makers will need to develop systems capable of responding to an enormous variety of conditions as the epidemiological transition matures.

The non-communicable diseases mentioned above are the one where Ayurveda is strong, so it will be unwise to any policies especially for South Asian countries to keep Ayurveda out of purview when they plan strategies for management of such newly evolving morbidity conditions.

There may be potential therapeutic strategies in the traditional systems which can counter the Microbial resistance also. Incorporation of these would be highly desirable.

It is also essential to revitalize these effective practices and protect them from erosion, as diversity of choice is important.

Medical anthropologists and sociologists should look at these traditions critically from the point of efficacy and productivity **(Young 1983)**[(6)] and promote the effective ones.

A debate between conventional medicine followers and Traditional, complimentary and alternate medicine followers are essential to resolve certain key issues.

Following are the major points of argument of conventional medicine to negate the scientificity of traditional system.

Existing conventional scientific knowledge is an adequate measure of whether an unconventional claim is true. Therefore, empirical evidence of an event that is not theoretically plausible can be rejected out of hand. If a practice lacks theoretical plausibility there is no reason to think that it may work. Acceptance of theoretically implausible claims would require the abandonment of current scientific knowledge. There are no such things as complimentary and alternative medicine; there is just medicine that is supported by solid research and medicine that is not. This argument does not hold good in many of the Traditional medicine experiences.

A study conducted on Chinese Moxibustion practice is an example to refute the theoretical plausibility criterion. The study involved 260 primagravidas in the thirty-third week of gestation, all with breech presentation diagnosed by ultrasound, who were randomly assigned to experimental and control groups. The experimental group received moxibustion, burning moxa rolls over acupoint BL67 (the corner of the fifth toe) seven days in a row, followed by seven more days if the breech presentation persisted. The control group received standard care plus external version if they wished. The study was not blinded. The moxibustion treatment reportedly produced a rate of cephalic version that strongly favored the experimental group. The results were highly significant in statistical terms ($p = < 0.001$,95 percent CI) at the thirty-fifth week, and somewhat smaller, but still very significant, favorable difference at birth.

At the beginning of the 21st century it is being realized that “cultural diversity” is important for civilizational evolution and that promotion of mono-cultural approaches, in any field, have serious limitations. In fact a balanced globalization process should actively promote cultural pluralism. Unfortunately this is not yet happening on the desired scale.

The appreciation of the value of diversity is far greater in the Arts – in the fields like Music, Painting, Food, Language, Textiles and Architecture, but it is also being recently realized in the Science particularly in the fields like Agriculture and Medicine.

Diversity is a natural characteristic of populations, it is adaptive and it can only be suppressed through constant effort. Culturally monolithic societies are like the uniform green lawns of the suburbs or the huge cornfields of factory farms. As soon as the gardener relaxes, wild flowers, trees, and shrubbery return. Whether one deplores or applauds this fact of life, there is no reason today to believe health pluralism will ever go away **(David. J. Hufford)**[(7)].

Diversity is here to stay, and that means, the tolerance of difference has become a

practical as well as an ethical necessity. That is true for countries and communities and it is true for intellectual traditions, including Western science. Fortunately, history shows that the confluence of cultures and the process of hybridization increase vigor. Diversity is good in gene pools and good in idea pools too, and for the same reasons **(David. J. Hufford)**.

Given the growing recognition of the contemporary relevance of traditional medicine in public health any initiative to promote the application of traditional medical knowledge must be sufficiently well versed in its understanding of the traditional knowledge system, on which traditional medicine is constructed. Particularly in the Asian context an in-depth understanding of not only the sociological and empirical aspects of traditional medicine is necessary but also of its epistemological foundations. A failure to appreciate the medical theories of traditional systems of medicine and a narrow pursuit of only its herbal remedies would result in certain destruction of traditional medical knowledge and perhaps only promote the appropriation of its rich herbal materia-medica.

In global forums an irrational and culturally improper position is taken with respect to evaluation of traditional medicine by insisting upon its validation in terms of the parameters of allopathic medicine and western biosciences. The impropriety of this approach can be guessed by imagining the predicament of Western medicine, if it were insisted that it should justify itself in terms of the parameters and theories of traditional Asian medicine.

It is irrelevant and immature to see Ayurveda as reflected through various practitioners and commercial interests. Now the science is taken forward by commerce because it is the only instrument available to spread Ayurveda. The need of the time is to establish many institutes of IIT caliber for Ayurveda. No farmer can plough the field with a stick; we should give him a plough. Likewise, Ayurveda needs institutional resources and scientists to popularize the effectiveness in terms of products and service in the area of healthcare.

Deploring comments on efficacy or otherwise of Ayurveda by non-scientific stream and assumptions made based on few practitioners is not the right way to take a science forward. The insignificant and directionless support of the Government to Ayurveda in post independent period and duplications of the patterns of Modern Bio-medicine in the areas of service delivery and educational institutions, etc. have only helped to distort and weaken the classical Ayurveda which holds the seed of regeneration of this science to address issues of contemporary world and future generation. In the name of development of Ayurveda, what is happening today is misappropriation of parts and bits of Ayurvedic remedies (not science or system) to modern medicine. Isolating active molecules or developing new dosage forms are not development of Ayurveda. Development of this system can happen only when it is studied from its epistemological foundations, from its worldview and in its totality.

Fortunately or unfortunately, this is slowly happening in institutions abroad, not in India. We are in slumber and waiting for the wake-up call from the West when it will serve us the same wine in new bottle with a seal of Western bioscience.

Joint Research projects between Western biomedicine and TSM are necessary and

desirable for promoting “mutual understanding, dialogue and exchange but not for validating TSM”. There is enormous variety of knowledge, natural resources, and skills that India has gained through perhaps one of the longest unbroken medical cultures of the world (5000 years). Based on these resources Ayurveda can make a marked contribution to all efforts in the context of pluralistic health care. If the need for supporting medical pluralism is appreciated and work towards this is initiated, TSM will be able to contribute to frontiers of medicine. This calls for a paradigm shift.

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Address for Correspondence : Dr. G.G. Gangadharan, Joint Director, Foundation for Revitalisation of Local Health Traditions, 74/2 Jarakabande Kaval, Attur Post, Bangalore-560 064 (India)