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FEATURE ARTICLE

Search of Novel Model for Integrative Medicine

Bhushan Patwardhan[1] and Gururaj Mutalik[2]

Prof. Gururaj Mutalik

ABSTRACT This article provides global and Indian scenario with strengths and limitations of present health care system. Affordability, accessibility and availability of health care coupled with disproportionate growth and double burden of diseases have become major concerns in India. This article emphasizes need for mindset change from illness-disease-drug centric curative to person-health-wellness centric preventive and promotive approaches. It highlights innovation deficit faced pharmaceutical industry and drugs being withdrawn from market for safety reasons. Medical pluralism is a growing trend and people are exploring various options including modern, traditional, complementary and alternative medicine. In such a situation, knowledge from Ayurveda, yoga, Chinese medicine and acupuncture may play an important role. We can evolve a suitable model by integrating modern and traditional systems of medicine for affordable health care. In the larger interest of global community, Indian and Chinese systems should share knowledge and experiences for mutual intellectual enrichments and work together to evolve a novel model of integrative medicine.

KEYWORDS Ayurveda, Chinese medicine, integrative medicine, healthcare

"He who does not trust enough, will not be trusted."

Lao Tzu

Global Scenario

Last century has been very remarkable and unique in the entire history of medical sciences. In fundamental sciences, discovery of double helix and completion of human genome project were achievements that had no parallel. In diagnostics, technologies like magnetic resonance imaging (MRI) and positron emission tomography (PET) scan added brightest feathers ever to our caps. In surgery, bypass, transplants, and prosthetics changed life expectancies upwards dramatically. In therapeutics chemotherapy and new drugs like selective serotonin re-uptake inhibitors revolutionized longevity and quality of life. The Human Genome Project has opened newer understanding in genomics and epigenomics are progressing towards personalized medicine. New technologies including stem cells, molecular medicine, robotics and nanotechnology are opening exciting new opportunities. Still, developing countries are confronted with disproportionate population growth, double burden of diseases and increasingly unaffordable health. Leaders, policy makers, and scholars, world over are grappling with possible solutions to these complex, not just complicated problems—because there is no magic bullet or no single solution.[1] Integration of traditional medicine (TM) and modern medicine may offer a solution provided both systems respect and trust each other. Words of wisdom from Lao Tzu will probably show us a way forward.

Indian Scenario

Despite huge investments, India paints a poor picture when it comes to the health of its citizens. The latest estimates for the vital statistics in India reveal crude birth rate of 22.5, crude death rate of 7.3 and infant mortality rate (IMR) of 50.0.[2] There are considerable disparities across India. For example, the IMR in Kerala is four times less than India average and five times less than that of Uttar Pradesh. Communicable diseases continue to pose a problem in India. Almost 1.5 million cases of malaria have

1. Interdisciplinary School of Health Sciences, University of Pune, Pune 411007, India; 2. Former Director, WHO Liaison Office New York, Present address: 1312 Cottonwood Trl, Sarasota, FL 34232, USA
Correspondence to: Prof. Bhushan Patwardhan, Tel: 91-20-25691758, E-mail: bhushan@unipune.ac.in

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been reported over the past five years. The number of Dengue fever cases has doubled from 12,317 in 2006 to 27,247 in 2009. More than 10 million cases of diarrhoea, 1 million cases of typhoid fever and almost 2.5 million cases of acute respiratory infections were reported in 2010. India continues to harbour the largest number of tuberculosis patients in the world.[3]

India is often refereed as diabetic capital because it is ranked first among the top ten countries and is very likely to maintain the same status until 2030. The number of diabetics in India is projected to rise from 31.7 million in 2000 to 79.4 million by 2030.[4] Hypertension prevalence of about 16% was observed in India.[5] Over 13 million people are estimated to be suffering from it out of which 62% are estimated to be males. Thus, India is bearing a double burden of disease, with significant increase in the incidence of non-communicable diseases while retaining burden of most of the communicable diseases.

In relation to the nutritional status of its citizens, India is faced with a paradoxical situation of persistent under-nutrition as well as the increasing problem of obesity. Low body mass index levels were observed in 35.6% of women and 34.2% of men. On the other hand, 12.6% of women and 9.3% of men were either overweight or obese. Further, it has been estimated that 69.5% of children age 6–59 months were anaemic, while 55.3% of women age 15–49 years were anaemic.[6]

The paradox that a heavily interventionist state, since independence, has never made health a priority in public policy or in the allocation of public resources. The Indian state's conception of development has allowed little space for the importance of health and wellbeing. Conversely, the political economy of health care in India has been characterized by widespread privatization, and the large role of informal sector in providing healthcare, even to the very poor. A history of under-investment and poor health infrastructure in the colonial period continued to shape the conditions of possibility for health policy in India after independence.[7] To achieve universal health care in India by year 2020, a creation of the Integrated National Health System has been recently proposed.[8]

Health and Disease

Traditionally, in India, health has been considered more in positive sense as a part of healthy life style. Indian medical heritage Ayurveda defines health in much broader manner as "Prasanna atma – indriya-mana" where body, mind and spirit are in the state of homeostasis and happiness or bliss. On the other hand, the World Health Organization (WHO) defines health as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. However, there is no good way to measure "well-being" and so generally absence of disease or infirmity is considered as "health". In many parts, terms "health" and "medicine" are actually used as synonyms.

While it is possible to diagnose and treat diseases, it is very difficult to understand or attain true health. There are medicines and surgeries to treat diseases or infirmity but not any one for attaining health. To attain health an individual has to actively participate in the process. There are four factors, which determine "health". Nutrition, life style, environment and genetics are the key determinants of health, which are like four pillars of any foundation. When any one becomes weak, a support system is needed as treatment or health care services. Probably, for this reason, most of the "Health Sciences" Universities in India deal more with "medicine" and not enough with "health". Such curative approach in contrast to promotion and prevention strategies remain one of the main cause of deteriorating "health" conditions in India. Disparity in health care delivery related to both quality and affordability has become a matter of great concern for world polity.[9] Innovation deficit, not for just pharmaceuticals, but also in healthcare delivery, has become a serious issue for policy makers.[10]

Drugs Are Dying

The modern drug discovery has significantly contributed to effective treatments and improved quality of life. Modern drugs have been responsible for curing, irradiating and controlling several diseases and disorders. Although, sometimes they are portrayed as being evil, toxic or bad, overall drugs, when used wisely are beneficial and good. While many drugs may have untoward effects, the benefits from drugs are far reaching and it may be unreasonable to aggressively critique modern drugs as killers, which in most of the cases is due to misuse of painkillers, tranquilizers, opioids and such other drugs.[11]

At the same time, we also must accept that the "drugs are dying". This may sound strange but it is

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reality. This is not a new phenomenon but has been happening for many years. A critical comparative review of monographs from British Pharmacopoeia from first edition in year 1864 to the latest edition of 2013 may reveal this fact easily. Very few exceptional drugs like aspirin have been able to sustain the real test of time. Many other drugs have actually died for several reasons making any Pharmacopeia as an extremely dynamic document.

Drugs fail or die due to several reasons but most of the time it is because of the toxicity, untoward events and other serious safety related issues. Drugs also die because of microbes or systems developing resistance or may be simply because the target on which the drug is acting gets modulated making that drug redundant. Drugs acting on single targets as agonists or antagonists are likely to produce direct and or indirect cascading effects in the whole physiological system because body actually constitutes a meta-network of targets interacting with each other to regulate complex biological metabolic processes.[12]

The systems biology principles indicate that seemingly simple drug acting on specific target can actually trigger a complex reaction somewhere else quite similar to a butterfly effect. In many cases, these are the main reasons of untoward effects of present drugs, which in long run may lead to death of that drug. Drugs also die if they are ineffective. Interestingly, drugs are also killed by pharmaceutical industries for business reasons. When new generation drugs are developed older ones automatically die. As a principle, drug discovery scientist would like to kill a drug as early as possible in the pipeline as carrying a bad drug towards end of the pipeline only increases the risks and costs.

Many drugs are getting killed by the regulatory authorities like Food and Drug Administration even after giving approvals. This is more worryingly especially because the regulatory process to approve any drug is indeed very stringent and long drawn process, which ensures safety and efficacy of any new drug through series of chemical, biological and clinical investigations. Still, starting with thalidomide in the decade of 1950 till today, hundreds of drugs have been killed by the regulators and were withdrawn from markets. A representative list of such drugs withdrawn from market is also available on Wikipedia.[13] This massacre of drugs has resulted in significant financial loss putting the whole sector in panic and traumatic situation. Clearly, market driven approaches to therapeutics and drug discovery have not been successful or sustainable.

Ayurveda and Drug Discovery

Ayurveda knowledge allows drug researchers to start from time tested and safe botanical material. The normal drug discovery course of "laboratory to clinics" in this case actually becomes from "clinics to laboratories"—a true "reverse pharmacology" approach. In this process safety remains the most important starting point and efficacy becomes a matter of validation. Concept of rasayana from Ayurveda provides valuable insights and materials for rejuvenation and wellness.[14] The best example of bioprospecting using traditional knowledge is reserpine, the anti-hypertensive alkaloid from *Rauwolfia serpentina*, which became available as a result of work carried out by Hindustan Ciba-Geigy Ltd. (Now Novartis India Ltd.) research center in close collaboration with Ayurveda experts. This process of natural product drug discovery was later named as "reverse pharmacology" by Ashok Vaidya.[15,16] A large number of molecules have come out of the Ayurvedic clinical base including Rauwolfia alkaloids for hypertension, Psoralens in Vitiligo, Holarrhena alkaloids in Amoebiasis, Guggulsterones as hypolipidemic agents, Piperidines as bioavailability enhancers, Baccosides in mental retention, Picrosides in hepatic protection, Curcumines in inflammation, Withanolides, and many other steroidal lactones and glycosides as immunomodulators.

In the future, however, present discovery need to go beyond prospecting active molecules from Ayurveda towards understanding of the effects of brilliantly formulated classical Ayurvedic formulations, for correcting "impaired physiological functions" that underlay symptoms. This strategy will usher in a new revolution in drug discovery derived from ancient eastern time-tested remedies. The strategy will involve using advanced technologies from the West to standardize the classical formulations and understand their pharmacology using newer biological models based on systems biology. TM-inspired drug discovery and development is therefore considered to be an efficient, faster and affordable strategy.[17] In this process translational research from Shastra (ancient science) to modern science will be the key.

Ayurveda is much beyond mere source of herbal medicines. The logic, theoretical foundations and epistemology of Ayurveda are based on the six darsanas, mainly the Samkhya and Nyaya-Vaisesika system of natural philosophy. While it receives acceptance and support of public, a due appreciation from the global scientific and medical community is still evolving. Historically Ayurveda has been inclusive, progressive and dynamic knowledge system with universal attributes. The idea of integrative approach to health care and cure has been the basic matrix of Ayurveda practice.[18] Charak Samhita states "the science of life shall never attain finality. Therefore, humility and relentless industry should characterize your endeavor and approach to knowledge. The entire world consists of teachers for the wise... Therefore, knowledge, conducive to health, longevity, fame and excellence, coming even from an unfamiliar source, should be respectfully received, assimilated and utilized."

Non-Drug Approaches

Healthcare is not restricted only to material medicine. Many non-drug interventions play crucial role in disease prevention and health promotion. Indian knowledge systems have Swasthavritta and yoga as main non-drug approaches. Swasthavritta offers detailed personalized advice on nutrition and life style along with seasonal variations. Concept of Prakriti in Ayurveda provides much deeper understanding of genetic and psychological profile of an individual.[19] Food and nutrition plays significant role in health care, however, just providing food does not necessarily mean providing nutrition to person. The modern approach based on mathematical calculations of calories and supply of proximate principles like proteins, fats, carbohydrates, minerals etc., is not complete because it does not consider the "person" who is consuming them for nourishment. Life cycle approaches to nutrition and developmental origin of adult diseases have emerged as major issues in recent years.[20] The community knowledge and practices also becomes very important since it is a continuum of valuable experiences. Modern medicine has very limited experience of this relationship and so India has a leadership advantage to promote and successfully demonstrate importance of these approaches.

Worldwide interest in yoga and meditation techniques is increasing. In addition to physical and mental benefits, the spiritual and biological effects of these ancient practices remain vital. The conventional medicine and yoga should complement each other; however, lack of adequate research is a limiting factor. The use of yoga to investigate human neurobiology has been studied to know how neural networks support different aspects of consciousness with help of positron emission tomography to identify brain regions active in different states of consciousness. The study of yoga has led to a new paradigm for understanding physiological states and mind body interactions.[21] Scientists have shown that dominant electroencephalographic activity in one cerebral hemisphere correlated with predominant airflow in the contralateral nostril.[22] This pattern of hemispheric activity and nasal airflow has been linked with rhythmic changes in cardiovascular activity, cognition, autonomic-nervous-system activity, and concentrations of plasma catecholamines, pituitary hormones, and even insulin.[23]

Yoga is not a quick fix for health, but it may hold surprises for those who are willing to make the effort.[24] A preliminary study has established benefits of yoga-based regimen in relieving some symptoms and signs of carpal tunnel syndrome.[25] Effect of yoga mantras have been reported to induce favorable psychological and possibly physiological effects.[26] In a randomized controlled study on lymphoma patients, the participation rates suggested that a yoga program is feasible for patients with cancer and that such a program significantly improves sleep-related outcomes.[27] Another prospective, randomized trial compared the efficacy of anti-tuberculosis treatment showed reduced symptoms suggesting a complementary role for yoga in the management of pulmonary tuberculosis.[28]

The mind-body relations are getting better understanding through research on psycho-neuro-endocrinological aspects and the next step appears to be its extension to deeper understanding concept of spirituality. Already, some studies related to out-of-body experiences have been well documented and studied.[29,30] Thus the ancient wisdom from yoga and Ayurveda shastras along with scientific advances in science and technology are paving new ways to understand complex relationships of body-mind-spirit to shape future healthcare.

Pharmacogenomics and Epigenomics

Sir William Osler in 1892 had stated "if there were

not for the great variability among individuals medicine might as well be a science and not an art." Since then we have come a long way. In the year 2000 when Human Genome Project was on horizon, Allan Roses wrote in *Nature* that "if Sir William Oslar would have been alive, he would have reconsidered his opinion." While medicine practice will continue to be an art, the medicine has become a science because of better understanding of underlying biological processes and the human genome. Although, we all look different, think different, act, respond and behave differently in situations; till recently, it was believed that all of us would respond to medicine in a uniform manner. However, now we understand how genetic variation lead to variation in the responses to drugs. This science known as pharmacogemomics has opened many new avenues towards personalized medicine. This is very much in line with what Charaka had stated almost 4,000 years ago that "every individual is different from another and hence should be considered as a different entity. As many variations are there in the universe, all are seen in human being." We hypothesized that Ayurvedic concept of Prakriti has genetic basis and showed that human leukocyte antigen (HLA)[31] and cytochrome P450 (CYP)[32] gene polymorphisms were significantly different in Vata, Pitta and Kapha Prakriti types. Other researchers also have confirmed genetic basis of Prakriti using more sophisticated methods.[33] Presently, a national project under guidance of Dr. MS Valiathan is underway for more conclusive evidence in the field now known as ayurgenomics.

The emerging science of epigenetics focuses on processes that regulate how and when certain genes are turned on and turned off, while epigenomics pertains to analysis of epigenetic changes across many genes in a cell or entire organism. Epigenetic mechanisms are affected by several factors and processes including developmental, nutritional, environmental and lifestyle. There is growing interest to study concepts of Swasthavritta, Pathya, Fasting, and Meditation etc. on epigenomics, which could have significant impact on health promotion and disease prevention.

Learning from China

China has successfully integrated practices from both traditional and modern medicine through a bottom-up approach. Their medical students take mandatory courses in both Western as well as TM and actively implement their knowledge in hospitals and teaching clinics.[34] As a result, Chinese physicians are familiar with the strong and weak points of both medical systems and can choose the right combination to maximize the positive effects. India and China share several concepts of TM.[35] India need to learn Chinese model of integrative medicine (IM) where Chinese medicine (CM) and biomedicine synergistically coexist and maintain integrity of individual systems.[36] Recent report prepared under aegis of Department of Ayurveda, Yoga, Unani, Siddha, Homoeopathy (AYUSH), Government of India also indicates need for integration of Ayurveda based on studying integration in China.[37]

In India, pioneering institutes like Banaras Hindu University adopted integration of the modern medicine superspecialities and traditional practices such as Ayurveda and yoga. Similarly, specialized institutions for yoga in Munger, Kaivalyadhama in Pune and Swami Vevekananda Yoga Anusandhan Sanstha (SVYASA) at Bangalore have unique integrative models of practice and biomedical research. Universities and centers of excellence for Ayurveda at Jamnagar, Jaipur, Coimbatore, Kottakal and Udupi are trying to maintain the purity of Ayurveda practice while being open to modern research. Establishment of Institute of Ayurveda and Integrative Medicine (I-AIM) and *Journal of Ayurveda and Integrative Medicine* (J-AIM) have given new leadership for research, education, advocacy and practice of IM pivoted on Ayurveda.

Often contemporary research has been more considerate to convenience of basic sciences methodologies. In the race of creating scientific data or evidence base, many a time scientists have not been particularly careful in reporting results of efficacy, usefulness or advantages of TM. Translation of Ayurvedic concepts into modern terminologies is another area of great concern, for instance, Vata is not air, Pitta is not fire or Kapha is not structure and Bhasma is not oxide—they have much deeper scientific meanings. Unless scientists understand these nuances of ontology and epistemology comprehensively, any attempt of so called validations will not only be unscientific but also detrimental and assaultive. In the past such ill designed scientific attempts have rarely led to any meaningful advancement of knowledge and in the contrary have seriously damaged the reputation of Ayurveda.

Shastra and Science

It is important to appreciate that while Ayurveda as "Shastra" and biomedicine as "sciences" share the same spirit of sincere enquiry, their perspectives on nature are different. Their philosophy, logic and medical theories are distinct. Sankhya and logical positivism form their differing philosophical foundations. Nyaya and Vaisheshikha as Indian philosophical systems vis a vis Aristotelian logic to guide their propositions; Panchamahabhuta and Tridosha face cellular and molecular biology in governing their respective medical theories. Such ontological and epistemological differences result in knowledge of varied natures. Ayurveda is systemic and holistic, whereas biomedical sciences are structural and reductionist.

Ayurveda Shastra and biomedical sciences can be integrated and are interrelated like whole and parts, where their relationship is not one to one: the whole is never equal to the part, nor does the sum of parts add up to the whole. The whole could be more than the sum of its parts. We should therefore not expect equivalence in seeking to develop this relationship. That would put us in danger of trying to reduce the whole to a part or of assuming that a part represents the whole. It would thus develop a distorted understanding. The collaboration between science and traditional knowledge can be fruitful because science uncovers details of parts so incredible that they enrich our understanding of whole; similarly new perceptions or insights revealed to the holistic perspective can fundamentally expand scientific viewpoint.

Many medical scientists have been looking at Ayurveda as a source of new materials and yoga as physical exercise, which can be studied using modern tools and technologies. However, real value of Ayurveda and yoga in their strong philosophical basis and fundamental principles, which can provide new leads and ideas for progress of modern science and biomedicine. Some new publications in high impact journals are indicative of this potential that remains to be optimally explored. However, Ayurveda lags much behind CM with respect to scientific research and publications.[38]

At this juncture, we should also remember that while allopathy was being transmuted into modern medicine by adopting emergent basic sciences, Ayurveda and yoga were stagnated. This has adversely affected their education and practice in India and abroad. The budding Vaidyas (Ayurveda practitioners), under various pressures including the economic, embraced the so called "integrated" practice comprising of allopathic medicines. The Indian education system also had tough time to convince scientific community about the value of protecting the foundations and basic principles of Ayurveda and yoga. During almost the same time there was mass increase especially in Ayurveda colleges both at undergraduate and post graduate levels. The quality of research in such new breed institutions remained far from desired or acceptable, especially the quality of research and education leading to MD and PhD degrees has become questionable. We need very intensive exercise to encourage strong research culture and build confluence of sciences, technology and medicine similar to what happened following Flexner Report in the US. An ambitious program known as Vaidya Scientists is aimed to build necessary capacity, competencies and confidence of young teachers and practitioners of Ayurveda and yoga.[39]

Rebirth of Healthcare

There is increasing consensus that "health promotion" and "disease prevention" must get precedence over "disease treatment" centered model of "health care". While medicine and drugs may continue to remain a part of life, their limitations, untoward effects and affordability is emerging as major concern. As a result, pluralistic systems have remained major part of healthcare. Recent health seeking behaviour studies and reports from WHO reveal that the majority of the global population is looking beyond any single system of medicine for their health needs.[40]

The modern world evidently is looking for a basket of effective, safe and affordable health care solutions from plural systems of health and medical knowledge.[41] At the frontiers of new thinking, the dimensions of preventive healthcare and wellness are also being seen to be as important as curative healthcare.[42] Traditional, complementary and alternative medicine (CAM) is being used by majority of people, especially as a primary healthcare and in chronic diseases. More than 100 countries have regulations for herbal or TM.[43]

In such a situation, the "integrative", whole system

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or holistic approaches, which take best of the available systems without bringing hierarchies or even intentions to undermine any, should be more acceptable for affordable global health. Prompted by this concern, even reputed organizations like the WHO and National Institutes of Health (NIH) have advocated optimal use of TM/CAM. Now, the Planning Commission, Government of India is recommending to mainstream Indian systems of medicine known as AYUSH as an effective and efficient vehicle to affordable healthcare to the large needy and underserved populations in the country. Thus, global trends clearly indicate that the new models of health care will be more interdisciplinary, integrative and inclusive where borders between systems like allopathy and alternative; modern and traditional; conventional and complementary or generalized and personalized medicine will fade and converge making the systems synergise and integrate.

This will be a true "rebirth" of health care where scientific evidence base shall continue to drive practice of medicine. Presently perceived relation of modern science restricted to modern medicine shall expand its scope to incorporate traditional, complementary and alternative systems of medicine. Of course, such integrative process should not compromise basic requirements of safety, efficacy, quality and ethics.

IM

The IM approach recently re-emerged with a hope to provide affordable practical resolve to global crisis in health care. The IM consortium consisting of several academic health centers including at Arizona, Duke, Yale, Harvard, Johns Hopkins, University of California at Los Angeles (UCLA) and Mayo Clinic in the US and Canada has strongly advocated it as a vital part of new health care system in the best interest of patients and public.[44]

Many countries like Norway (TromsØ), Sweden (Karolinska), Australia, China and also from Asian, African, European and Latin American regions have IM initiatives. Generally, IM involves interplay of various systems of medicine and therapies including allopathy, complementary, alternative and traditional medicine. As a scientific platform IM focus will be more on promoting innovative, efficient, evidence-based affordable treatments, prevention, wellness, patient-centric care. China has developed several partnerships and collaborations especially with US universities, while Indian efforts are underway to build such mutually beneficial exchange.[45]

Integrative Approach

While the advances in sciences, bio, nano, robotic, computational, imaging and high throughput technologies including genomics, epigenomics, molecular medicine, biologicals, stem cells and new therapies would continue to revolutionize the domain of healthcare, serious issues of affordability and accessibility seem to continue in future. Therefore, not the hotchpotch "integrated" practice but whole system "integrative" approaches will be in the best interest of people.[46]

It is heartening to note that the Planning Commission has taken right steps in this direction starting from the 12th Five-year Plan. Steps have been taken to mainstream AYUSH in the healthcare delivery and health research. Significant contributions made by Member Health Dr. Sayeeda Hamid and Director General Indian Council for Medical Research Dr. Visha Mohan Katoch who also is Secretary of Department of Health Research, Dr. Sam Pitoda who is Chairman of National Innovation Council, Dr. R.A. Mashelkar former Director General Council for Scientific and Industrial Research must be applauded. The Karnataka Knowledge Commission under leadership of Chairman Dr. K. Kasturirangan who also happens to be Member S&T of Planning Commission has made significant innovations to improve affordability and accessibility of health care.[47] Recognition of Foundation for Revitalization of Local Health Tradition as a new State university for trans-disciplinary and translational research is another progressive step taken by the government of Karnataka.

Novel Model for Integrative Healthcare

Regional traditional practices and cultural diversities require suitable models of integrative medicine to meet respective healthcare needs. China has successfully integrated traditional and modern practices by experimenting ideas like barefoot doctors, herbal medicines, acupuncture and modern medicine working synergistically in the best interest of people. Similarly, India needs to invent its own model to address various challenges including the double burden of disease, increasing gap between rich and poor, affordability, availability and accessibility of health care among many others. These challenges

are confronted with other realities including limitations of modern therapy. Many psychosomatic and syndrome conditions do not have effective treatments except symptomatic relief. We need better, safer and affordable drugs especially for neglected diseases. We can not ignore the fact that over 6,00,000 AYUSH practitioners are available in the country and we need to mainstream them without compromising quality and ethical considerations. In India, we can not think of effective healthcare without AYUSH sector.[48]

A true success and test of "integrative" approach will remain in the ability to recognize, respect and maintain respective identities, philosophies, foundations, methodologies and strengths intact while building sufficient evidence base. We also must remember that "absence of evidence is not evidence of absence." We need to be little humble before criticising or praising any system or monopolizing the science or the evidence base medicine. In all fairness, it is crucial to ensure that the required rigor of the science is achieved without compromising the foundations of the traditional practices and knowledge.

Although, it may take some time to evolve a universal model of IM, in the larger interest of global community Indian and Chinese systems should share knowledge and experiences for mutual intellectual enrichments and work together to expedite this process. Such an "integrative" exercise is extremely complex and risky—almost like "riding the tiger". There is a chance of getting lost or carried away with risk of losing identity, on the other side there is a danger of getting swamped.[49] Let's hope that rather than a tiger-ride, a new model of integration actually becomes an elephant-ride to raise the vision, widen the horizons and enhance the knowledge that ultimately benefit the humanity.

Conflict of Interest

Authors have no conflict of interest.

Author Contributions

Both the authors have equally contributed to this article.

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