



The importance of epistemology and translation for health and integration: A commentary on the special issue 'Integrative approaches to health'[☆]

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ABSTRACT

In this commentary on the J-AIM Special Issue 'Integrative Approaches to Health', we argue for plural narratives of health to balance and to reconnect human populations with their environments, to foster a renewed culture of health and wellbeing. Integration of our inner and outer ecosystems with pluralistic health systems requires 'movement' and 'change' and the special issue provides papers on integration and health from multiple disciplinary perspectives that study humans, non-human, animals, and plants in relation to clinical trials, individual and population studies and health systems. All these perspectives provide new insights to map integrative approaches in health, illness and wellbeing in times of the climate emergency.

To ameliorate the biomedical and biopharmaceutical industries 'medicalisation of life' as the hegemonic and thus totalising human and more-than-human health systems and approach, the special issue acknowledges, situates and authorises broader visions and epistemologies of health and disease. These complementary epistemologies, their words, their movements (*Ayu*) and their health (*Swastya*) and balance (*Soukya*) are contained within indigenous health systems that include Ayurveda and Traditional Chinese Medicine (TCM) amongst a vast array of local health cultures across the globe. In contrast with the narrower approach of medicalisation; integrative, inclusive, plural and sustainable approaches to health involve the respect for a population's self-reliance in health (the 4th Tier) and the dignity of the Sanskrit word for health, 'Swastya' which means 'being rooted within'. These perspective and epistemologies will help to create a vision for health and health systems that encourage integration through the dignity of the individual (*Atmasnman/Anubhuti*), respect for the other (*Pra-tiksha/Adara*), trust in community (*Nyasa*) and the creation of systems of equity (*Samata*) and social justice for all (*Nyaya*).

1. Introduction

The quote from Thomas Berry that begins this commentary tells us that we are 'stuck' in a particular epistemology that has contributed to our current situation of environmental degradation. Berry argues that we need to find a 'new story', a new narrative to look at ourselves that reflects that we, humans, are part of nature. In September 2022, the Transdisciplinary University (TDU) in Bangalore held a meeting entitled

'Dhara Vision Ayurveda 2047'; a meeting directed at looking to future generations and using an anniversary of one hundred years since India's independence from colonial rule as a milestone. *Dhara* is a Sanskrit term used to refer to the flow of a stream or waterfall (Sanskrit: धारा). The meeting was an invitation for fluid and imaginative discussion of different ideas to create a 'new story for 2047, drawing on varied perspectives, approaches and disciplines, unchained from the narrow western focus of science in medicine and global public health that

[☆] 'This is the age of dominance of the human over the natural; it is also the period when the numinous presence pervading the universe was diminished in human awareness in favour of a dominant preoccupation with human reason, human power, and the sense of the machine as the dominant metaphor for understanding the reality of things' [1]. Peer review under responsibility of Transdisciplinary University, Bangalore.

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separates the human from nature through its narrow epistemology biomedical reductionism [2]. The meeting sought to create a space to encourage deep thinking, listening and potential engagement, including through concepts such as: soul, spirit, the sacred, integration and love.

The intention of this commentary is to bring together themes that emerged from many of the Special Issue papers (Annex 1) and which, like 'Dhara Vision Ayurveda 2047', aim to assist individuals, communities of scientists, and health care practitioners in their search to translate and integrate their work into a 'new story' as parts of a new inclusive narrative.

1.1. Setting the scene for a 'New story'

Biomedicine is promoted and favoured, almost globally, as the normative state-sanctioned approach to health and disease. This is occurring through the '(bio)medicalisation of life' [3], which depends on the commodification of nature and our lives into products [4,5] in the name of economic growth [6] and 'overlooks our interdependence with other beings, the environment and biosphere(3). This is not only increasing our disassociation and disconnection from our bodies, but also more broadly, a 'disintegration of the life systems of the planet just when the Earth in the diversity and resplendence of its self-expression had attained a unique grandeur' [7].

This is reflected in our health systems limited ability to address, let alone reverse, rising reports of microbial dysbiosis and mental health conditions like depression and anxiety, which are symptomatic of the widespread embodiment of the modern idea of nature, where the human is dissociated from the non-human and their environments. This is also evident, when we look at the increased unsettling and disputes over concepts that have been central to western epistemologies such as 'science', 'truth', 'reality', 'life', 'world', 'earth', 'humanity', 'body', 'health' and 'disease' [8,9].

Each of the 23 papers published in the Special Issue (Appendix 1) encourages us as scientists to delve deep into different parts of ourselves and to find different perspectives to health and wellbeing that link and integrate different systems and approaches to health – from the cell, to the tissue, to the physical body to breath, from life to death, ourselves as indissociable agents of human and more-than-human nature. Contained within the general ethos of the Collection, there are different specialisms and disciplines, including laboratory-based research, toxicity studies, population-based research with clinical trials and disciplines such as philosophy, health system policy, economics, and history as well as experiential narratives on what integration of health means. The papers range from research on plant remedies [4,10–12] to work on cells in animals [13], to human conditions [14] to respiratory related illnesses, pranayama and yoga breathing [15–17] pluralistic approaches to diagnosis and care [18,19], to commodified traditional wisdom [5], to public perception and health care choices [20,21] to methodological analysis of clinical trials [22]. Many themes emerge and the 'integration' of the perspectives of the papers provides different insights that are contained in the last column of the table. For us, the transdisciplinary *Ksobha* group (see acknowledgements), there are 6 major themes that emerge [1]: Traditional Plant Medicines [2]; Breath [3]; The Role of Clinical Trials for the Validation and Increase Uptake of AYUSH (Trials for Methods of Science) [4]. Ayurveda Approaches to Biomedical Classification of Illness/Risk [5]; Health systems; and [6] Death as an Integrator (Annex 1).

Although biomedicine have come to dominate globally, many different medical traditions, such as Traditional Chinese Medicine (TCM) in China or Unani medicine, Siddha medicine and Ayurveda in India continue to co-exist alongside it formally and informally. However, the epistemologies of health contained within ancient traditions and many of their healing practices are incommensurable and resist integration and translation into biomedicine [23] and are thus commonly ignored or dismissed by its practitioners as 'esoteric' or 'folklore'. There exists a mind-body dualism in the Western allopathic system, as opposed to the holism of many traditional systems, which do

not conceive of the body as a simple sum of its parts, and this is the perspective that currently dominates global health systems.

As this Special Issue demonstrates, engagement with many of these medical traditions can and have provided many of the pharmaceutical products' biomedicine depends on. However, importantly, they also challenge the modern story with their different and inclusive narratives that understand and imbibe the earth, its processes, and us as human beings, as just one amongst many parts of those processes [24]. Such an engagement requires not only a dramatic shift in and focus around health and well-being, but also a deep questioning of who and what 'we' [25] believe we 'are'. Central to this is, the need to attempt to live a process of total interdependence and 'oneness' (26); what Ravi Ravindra describes as a sacred and transcendent process [26]. This means carefully considering the values and epistemologies that we and our stories and medical practices embody. Here embodiment 'is not just a location for society and culture, however, but *forms a basis for and shapes* our relationships and creations' [27]. For example, embodied knowledge as a feminist epistemology (ways of knowing) draws on lived experiences as the basis on which to challenge and build on scientific objectivity and positivism [28].

Our lived experiences of health are composed of much more than individual physical illnesses and well-being. They involve communities of human and other beings, connections to the earth and our local environments, as well as spiritual and religious aspects. Engagement with 'integrative approaches to health' means engaging with all these elements, which are inherent in diverse forms in local health cultures and traditions across all continents and are little understood or respected in biomedicine.

2. Finding new stories; integrative epistemologies of health

In his 1988 book 'Dream of the Earth', which anticipates our current climate emergency, the cultural historian and climate activist Thomas Berry proposed an educational course to assist with the anthropogenic disintegration of ecosystems and non-western forms of living and environments that involves an expansive understanding of medicine:

Medicine in this context would envisage the earth as primary healer. It would also envisage integration with earth's functioning as the primary basis for health for the human being. The role of the physician would be to assist in interpreting the earth-human relationship and guiding the human community in its intercommunion with the earth, with its air and water and sunlight, with its nourishment and the opportunity it offers for the expression of human physical capacities [1].

Pluralistic and integrative approaches to health not only understand, but embody the interlinking and connection between humans, animals, plants and whole ecosystems. It could be considered that 'the art of medicine' is generally lost in biomedicine because it follows a globally dominant version of scientific knowledge that overemphasises separation, reduction and objectivity as the only way to find truth [29,30]. Rather we should practice science, a method of inquiry (from 'scientia'), as the systematic pursuit of knowledge, which is open to different meanings, perspectives, methods and epistemological traditions [2].

For example, the epistemology of Ayurveda [31], stresses: direct perception (*Pratyaksha*); inference from prior knowledge (*Anumana*) [32]; from the *Apta* (people who speak the truth) *Aptopadesha*; and intellect (integrating perspectives) *Yukti* [33]. Biomedicine similarly draws on: perception (empirics); deductive processes of knowledge construction (Aristotelian logic); testimonies from authorities (prestigious academic journals), and the integration of perspectives through triangulation and meta studies (collaborating scientific data from an array of empirical studies). These epistemological similarities between Ayurveda and biomedicine can ensure shared pursuits of knowledge and truth. However, it is important to recognise that whilst similar, they are not the same. Within the differences there may be important truths that

can be uncovered in seeking 'integration' that help to create inclusive narratives of health and healing.

To bring forward 'new stories', that is, inclusive narratives to contribute to 'integrative approaches to health', involves shifting perspectives as well as engaging constructively with the dichotomous understanding of science and scientific knowledge in the West. In this sense, the term 'cognitive justice' (the right of different forms of knowledge to co-exist) [34] seems to address and helps to balance the current distortion of the global definition of science used in healthcare and its systems which reductively places the rational over and in opposition to the intuitive, the mind over the body and fails to engage with differences in affirmative ways.

2.1. Translation and the language of separation and change

The special issue is entitled 'Integrative Approaches to Health'. What does health mean? [35] And what does the word 'integrative' mean, how is it translated in different languages and how does each word affect the body? Integration is a verb, and verbs are relational and emphasise movement relative to nouns, such as 'health', which objectify. Language is a medium of communication through creating discourses, relationships and harmony/balance and are experienced through the body. "Words can [also] smother us, enrage us; they can leave us full or empty. When they touch us, they create an impression" [36].

English is currently the dominant language of global health. How much is lost and misunderstood because of the standardisation that comes along with English? For example, it could be argued that the English language, along with its associated modes of thinking and being, have 'colonised' the world of global health and health care. How much has and is lost therefore in translation and how much is waiting to be found through other languages? How much has been lost in health and in public health, because of the focus on 'the population' with standardisation and inference, and a separation from the individual? How much has been lost because of our apparent separation from nature and how much could other languages and approaches and epistemologies help to remedy the current position?

These questions directly relate to decolonial theories and practices, focused on countering the universality of European colonialism and modernity through devising alternative forms of knowledge and being. Central to decolonial theory is the idea of scientific pluralism, by which different epistemologies and ontologies of science coexist [37]. Against unidirectional ways of understanding and disseminating scientific and technological innovation (i.e. North to South), decolonial theorists have insisted on restoring and providing visibility to South-to-North and South-to-South innovation, both in the past and the present [38,39]. Influenced by the writings of Gloria Anzaldúa, Frantz Fanon, Anibal Quijano, and Enrique Dussel, cultural theorist Walter Dignolo [40] argues that the practice of liberation and de-colonization is initiated with the recognition, in the first place, that the colonialization of knowledge and being consisted of using imperial knowledge to repress colonized subjectivities and the process moves from there to build structures of knowledge that emerge from the experience of humiliation and marginalization that have been and continue to be enacted by the implementation of the colonial matrix of power. For decolonial theory to be fully operative, he writes, we must begin to imagine such alternatives from the perspectives and consciousnesses unlocked in the epistemic, ethical and political domain of the geo- and the bio-political loci of enunciation and of action [40]. Dignolo refers to this practice of decolonisation as the 'grammar of de-colonization', which involves a 'de-colonization of knowledge and of being—and consequently of political theory and political economy'.

An insightful example of Dignolo's 'grammar of de-colonization' is the ecologist Robin Kimmerer's 'Braiding Sweetgrass ...' (24). She describes her insights as an indigenous person/scientist/academic living within the current cultural paradigm, when trying to understand an Ojibwe word (e.g. wiikewegamma) and realising that this language

invoked and provoked a different part of herself (body, mind and spirit) and her understanding of the outside world. Language, and the essential energy contained within a word, is clearly an essential link between our inner and outer environments; our inner and outer ecosystems [24].

In terms of how the meaning of words change, Ravindra points out the changes in the meaning of the scientific word 'experiment'. The words experiment and experience come from the same Latin root 'experiri' which means: to try something thoroughly, to risk oneself, to undergo [26]. Although coming from the same root, the word experiment is no longer used as a transitive verb like experience so ... 'the word experiment sets things apart from the one who is involved'. This is the separation that continues to occur between our inner and outer ecosystems. Language is at the root of culture, so the changing meaning of these words helps us to see the separation that has occurred between the human being and 'the experiment'. We are no longer in the experiment, we are outside, watching it, using it for our own purposes. We are not integrated, and we are not whole. The etymology of the word *Ayur-Veda* is itself very significant. The root meaning of the word *Veda* is knowledge, but the meaning of *Ayu* is superficially understood. The root meaning of *Ayu* is not merely life processes but is derived from *gachati, gaman* which means "change." The term Ayurveda thus refers to 'dynamic knowledge of biological changes in life processes' [30]. In terms of the word 'integration', etymologically, the word 'Yoga' means *integration* and a *Yogi* is 'someone who is integrated' (26). In the West, these are the very same issues that intrigued and galvanised Gregory Bateson the anthropologist and philosopher to create the word 'abduction' to describe the patterns/processes/movements/through which all living things are connected [41].

2.2. Movement as integrator

The word 'integrative' (a verb) is linked to 'integrity' (a noun): 'the quality of being honest and having strong moral principles that you refuse to change; the quality of being whole and complete'. The special issue provides an opportunity of linking, uniting and creating relationship through movement between different objects and perspectives, this directly relates to words, communication and translation. This definition draws us towards the body and its role in movement and 'integration'. Every second, our bodies are finding ways of creating balance and 'wholeness' [42]. Health disciplines like osteopathy, and integrative and functional medicine provide opportunities to connect different medical and health approaches for the benefit of the individual patient [43]. The perspective of 'Integrative approaches to health' is therefore looking for the connections between all the different perspectives and ideas on health and medicine that occur within our bodies, and the link between our inner and outer ecosystems [3] (See papers in SI from Sawyer and Hankey).

The word '*swastya*', 'being rooted within' is the Ayurvedic perspective on health and wellbeing. Being rooted, means our bodies and our connection to the ground and to the earth beneath our feet, as well as our movement and sense of it, comes through our bodies. Breath animates the body and makes it 'alive' and is therefore a focus for healing and integration. How we breathe and what we breathe affects who we are and how we function. Breath is the 'integrator' of our bodies and minds and breath is the universal spirit ('numinous presence' Thomas Berry) that we discuss using different terms and terminologies [15].

Going beyond our bodies (our inner ecosystem) and into our connections with nature (our outer ecosystem) engages with the unknown and with the concept of 'spirit'. 'Spiritual knowledge, unlike scientific knowledge, is based on insights coming from beyond thought and through a silent mind, and is therefore free of the necessary restrictions imposed by the mind' [26]; such as the supposedly common sense notion, developed in classical mechanics, that space and time are independent of each. This form of knowledge requires different epistemologies from those found in many, globally prevalent scientific approaches, ones that go beyond the body into breath, spirit and nature.

3. Discussion

Science and global health are held within what Theodore M. Porter calls "quantitative rigor" [44] which, arising from political pressures, prevents movement and change into dimensions other than the objective precepts of the Cartesian scientific method and so-called "evidence-based" biomedicine. Different perspectives and approaches are being prevented through the politics of knowledge and what is considered appropriate for the biomedical and biopharmaceutical market. To find 'integrative approaches to health' for future generations (ie for the 7th generation as in indigenous decision making) [45] we need to break out from the '(bio)medicalisation of life' to engage with nature as a healer [1] and an understanding that we ourselves are simply a part of a magnificent whole that balances itself constantly [46].

3.1. Deep time

In his book 'The Good Ancestor: how to think long term in a short term world', the philosopher Roman Krznaric describes the 'tug of war of time' with six drivers of short termism and a need to think long term with drivers like intergenerational justice and a transcendent goal of 'striving for one-planet thriving'. The drivers identify the broad philosophical and epistemological dimension of what is happening in climate change; why it is occurring and what we can do to alter the situation and to find harmony and balance (*Soukhya*). Intergenerational justice directs us to consider decisions made for 'the seventh generation', a decision process that is inherent within indigenous communities and cultures and very different from our current process for creating global health policies [45].

3.2. Interconnection

To engage with wholeness and the word love, it is appropriate to simply look at the need, particularly in western democracies to move from the 'I' to the 'We' [47]. Globally, the individual is unbalanced around 'the individual' with community connections being lost and a need for integration and relationship to be happening through our deep interconnection as human beings. Where is the harmony for us as human beings? In her paper on Gross National Happiness (GNH) in the Special Issue, Richardson says: '... happiness in Bhutan is not seen as a 'feel good' feeling or state that can be achieved at an individual level. Rather it recognises the deep interconnectedness of all beings and emphasises that true happiness is about living in harmony and developing our own potential, wisdom and awareness in service of the wellbeing of others. This requires a balanced approach between mind and body and between spiritual and material needs. It emphasises the importance of sufficiency, inter-connectedness, service and self-cultivation' [48]. The move from the 'I' to the 'We' also provides an opportunity to go beyond the human to the animal, plant, air and nature; a theme and ritual and understanding held within the ancient healing traditions like TCM and Ayurveda [29,49]. These perspectives are components of the concept of the 4th Tier in the Health System; population self-reliance in health [35], a system and approach that encourages the integration of health systems through the individual and their connection to community and to nature.

Each scientist needs to find ways of 'working on themselves' of changing, of finding new perspectives and of working with values that include: the dignity of the individual (*Anubhava*), respect for others (*Pratiksa*), trust in community (*Nyasa*), equity in the system (eg integrative approaches to health) (*Samata*) and social justice for all (eg Universal Health Coverage (*Nyaya*)). These values emphasise connection and wholeness.

Because of the earth and ecosystem degradation, ecological justice and sustainability are essential. It is hoped that this Special Issue will encourage scientists to dive deeply into themselves to find different approaches, different visions, and different ways of being. The papers in

this edition on Yoga and the History of Yoga encourage us to get involved in this powerful ancient health and healing tradition [15,50,51]. As Kimmerer the ecologist who is a citizen of the Potawatomi Nation in the US says in her book 'Braiding Sweetgrass' (24) we need to do science with 'awe' and 'reciprocity' and to understand that this (i.e. science, scientia) in itself is a powerful act of reciprocity with the more-than-human world. She writes: 'I've never met an ecologist who came to the field for the love of data or for the wonder of a p-value. These are just ways we have of crossing the species boundary, of slipping off our human skin and wearing fins, or feathers or foliage, trying to know others as fully as we can. Science can be a way of forming intimacy and respect with other species that is rivalled only by the observations of traditional knowledge holders. It can be a path to kinship'. This path to kinship encourages the shift from the 'I' to the 'We'. This approach also encourages each of us as individuals and as scientists to engage with the sacred and what that means to us. The sacred as a term that 'takes us beyond our comfort zones' into 'not knowing' and into other realms supported by the long-term drivers that Roman Krznaric mentions [45].

The immanence of Integrative Approaches to Health needs to address this transcendent goal that involves working with the words sacred and love. As he says in his book 'Science and the Sacred' Ravi Ravindra says [26]; 'It is obvious that scientists are human beings before they are scientists. They also experience love and seeing a close friend die, they also wonder what happens when what I usually call myself will die'. In this Special Issue the paper by J Sawyer takes us into the realm of palliative care and death and how to integrate this approach into a health system [52]. Ravindra says: 'the reconciliation of spirituality and science needs to take place in the soul of the same person so that there can be purposive action without self-centredness, individuality without egoism, wholeness without loss of uniqueness.' (26)

3.3. Imagination

In moving from the 'I' to the 'We', we interrogate the meaning of the word 'community' and how we create and sustain societies and nations. In his article in the New Indian Express in February (Feb 8, 2023) entitled 'Reinventing civil societies and democracy', Shiv Visvanathan the creator of the concept of 'cognitive justice' says that 'civil society must go beyond the nation-state to renew the idea of the Earth as an imagination. The ideas of the Earth, ethics and the Anthropocene have to be woven together. Civil society is the humus for reworking the democratic imagination' (34).

So, it is not simply about thinking, feeling and intuition, it is also about 'imagination'. This is what it means to integrate and to transcend, to rise above. He also says that 'the citizen needs to be seen as the repository of original knowledge, not simply the passive consumer of it' (34). For knowledge about health, this is about the 4th tier in the health system; population self-reliance where the health system needs to engage with the population in a different, more imaginative way as a repository for knowledge on life, health, nature and well-being. In protecting nature, we inaugurate our moment for peace. Integration of health is about finding health and '*soukya*' – balance and peace.

4. Conclusion

The term 'Cognitive justice' is about the right of different forms of knowledge to co-exist [34]. It is about equity and social justice and creates a scope for incommensurable knowledge traditions to coexist and dialogue with one another. Balance is important and currently the dominant biomedical model controls and governs science and global health care. In integrative approaches to health, we need to integrate these different forms and perspectives to find the whole and to re-engage with nature. Rather than 'cognitive justice' per se, maybe what we need is a simple acknowledgement of the potential and capacity of pluralistic approaches to contribute to life, if people having sufficient capacities can bring them forward for the health of patients, in a proper blend and

balance.

The mindfulness of the scientist/physician/observer is beyond the two valued logical interpretation of observations suggested by Aristotelian logic and the rational state. These ancient knowledge traditions stress the importance of mindfulness and interconnected self-awareness. Caraka explains this as *Sadvritti* which stands on the principle of the well-being of humanity as integral to the wellbeing of the planet⁽³⁾. This cosmology engages with and emphasises the importance of individual, communities (animal, plant, ...) and nature and the need to go beyond the individual. Each scientist needs to find his or her way to move beyond the boundaries of the current biomedical paradigm into community, into nature and into *Sadvritti*.

To create the 'new story' and 'integrative health systems for the 21st Century, 'the plural health seeking behaviour of millions of citizens suggests that a creative, functional, reliable form of integrative healthcare is imperative' [30]. We need to integrate our perspectives, to link our inner and outer worlds through our bodies, minds and spirits. We need to work both internally as well as externally and we can use the ancient wisdom teachings and understanding of health to guide our path. To start however, maybe we could simply begin by acknowledging the potential and capacity of pluralistic approaches to health and healthcare to contribute to the life and health of the planet?

The Ksobha group and its work

Kṣobha क्षोभ is a Sanskrit word, whose meanings include: shaking, moving, tossing, jolting, agitation, disturbance, excitement. We are a transdisciplinary group exploring the links between spirituality, biodiversity, and socio-cultural values to advance inclusive, plural more-than-biomedical healing.

Declaration of competing interest

The authors declare that there is no conflict of interests regarding the publication of this paper. Though first and last author has been working with J-AIM as guest editor for this special issue on integration.

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Annex 1. TABLE OF PAPERS IN THE SPECIAL ISSUES: 'INTEGRATIVE APPROACHES TO HEALTH'

Themes: (1) Traditional Plant Medicines; (2) Breath; (3) The Role of Clinical Trials for the Validation and Increase Uptake of AYUSH (Trials for Methods of Science). (4) Ayurveda Approaches to Biomedical Classification of illness/Risk; (5) Health systems; and (6) Death as an Integrator.

Traditional Plant Medicines

Picrorhiza kurroa, Royle ex Benth: Traditional uses, phytopharmacology, and translational potential in therapy of fatty liver disease

Single plant remedies from traditional Indian medical systems in focus

8th International Congress of Society for Ethnopharmacology India - "Ethnopharmacology and Medicinal Plants – Approach towards product development"

Can Guduchi (*Tinospora cordifolia*), a Well-known Ayurvedic Hepato-protectant Cause Liver Damage?

An in vivo acute toxicity and anti-shigellosis effect of designed formulation on rat

Breath

Impact of Add-on Yoga Breathing and Relaxation on Quality of Life, Anxiety, Depression and Pulmonary Function in young adults with bronchial asthma: a randomized controlled trial

Efficacy of Pranayama in Preventing COVID-19 in Exposed Healthcare Professionals: A Quasi-Randomized Clinical Trial

A century of 'the science of yoga' (1921–2021): Revival, renewal and renaissance

Design and Implementation of a Highly Efficacious new Yoga Breathing and Relaxation Protocol for Asthma: A Discussion and Summary

The Role of Clinical Trials for the Validation and Increase Uptake of AYUSH (Trials for Methods of Science).

Methodological analysis of CTRI registered clinical trials on Ayurveda interventions for COVID-19 management

An integrative approach with Ayurveda and Traditional Chinese Acupuncture in Post Covid Parosmia – A case study.

Conserving traditional wisdom in a commodified landscape: Unpacking brand Ayurveda

Prameha purvaroopas as diabetes risk predictor - trends from a retrospective cohort study of newly diagnosed type 2 diabetes patients

Ayurveda Approaches to Biomedical Classification of illness/Risk

Efficacy of Whole System Ayurveda Protocol in Irritable Bowel Syndrome –Randomized Controlled Clinical Trial

Ayurveda Management of large endometrioma – a case report

Public perception of Ayurveda-based clinical trials

Health systems

A survey of patients visiting an Ayurvedic teaching hospital for factors influencing the decision to choose Ayurveda as a health care provider

Learnings from a veteran oncologist's long-standing efforts in Integrative Oncology

Integrative Practice in Asia – India and China

How does Gross National Happiness offer an integrated perspective linked with health, economics, spirit, and nature?

The Principles of Health, Illness and Treatment: The Key Concepts from 'The Yellow Emperor's Classic of Internal Medicine'

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Reimagining India's National Health System (NHS)

Death as an Integrator

The darkness that gives light its beauty: Understanding dying as a focal point for defining an integrative approach to health and social care

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