Main Features of the Theoretical Paradigm of Traditional Chinese Medicine

Principais características do paradigma teórico da Medicina Tradicional Chinesa

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ABSTRACT

Traditional Chinese Medicine (TCM) has shown great potential for improving people's health and well-being and TCM is an important part of the healthcare system worldwide. However, understanding its importance and clinical effectiveness requires a thorough understanding of its theoretical framework. The aim of this article is to briefly present the main characteristics of the TCM paradigm and theoretical system. Firstly, the theoretical system of TCM is characterized in general terms and then the main characteristics of its theoretical paradigm are explained in simple terms. In this context, its systemic (holistic), phenomenological, dialectical and person – and clinic-centered nature is presented. Finally, the importance of TCM in the WHO's One Health System concept and its inclusion in the new efforts to develop a One Health System Workforce are emphasized.

KEYWORDS

One health system and Traditional Chinese Medicine (TCM), TCM paradigm; Systemic medicine and TCM, Phenomenology and TCM, Dialectics and TCM, Patient-centred clinical practice and TCM, TCM theory.

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RESUMO

A Medicina Tradicional Chinesa (MTC) tem demonstrado um grande potencial para melhorar a saúde e o bem-estar das pessoas e a MTC é uma parte importante do sistema de cuidados de saúde em todo o mundo. No entanto, a compreensão da sua importância e eficácia clínica requer uma compreensão profunda do seu enquadramento teórico. O objetivo deste artigo é apresentar sucintamente as principais características do paradigma e do sistema teórico da MTC. Em primeiro lugar, o sistema teórico da MTC é caracterizado em termos gerais e, em seguida, as principais características do seu paradigma teórico são explicadas em termos simples. Neste contexto, é apresentada a sua natureza sistémica (holística), fenomenológica, dialética e centrada nas pessoas e na clínica. Por fim, enfatiza-se a importância da MTC no conceito de Um Sistema de Saúde da OMS e a sua inclusão nos novos esforços para desenvolver uma Força de Trabalho no âmbito de Uma Sistema de Saúde.

PALAVRAS-CHAVE

Um sistema de Saúde e a Medicina Tradicional Chinesa (MTC), Paradigma da MTC; Medicina sistémica e a MTC, Fenomenologia e a MTC, Dialética e a MTC, Prática clínica centrada no paciente e a MTC, Teoria da MTC.

Introduction

I know that the merciless dimensions of Life ignore the whole man, dissolve him, and yet in this insignificance, gratuitous and devoid, I am the Universe, with nebulae and everything.

António Gedeão

Traditional Chinese Medicine (TCM) represents a scientific and humanistic culture that translates millennial experience in our global health system. TCM has a rich connotative theory, a profound clinical efficacy and a strong vitality that allows a dynamic adaptation to present life and modern health challenges.

The concept of health reflects the culture of a society, shared by its members, and the application of its science and technology in daily life. Human health is a dynamic functional state, an integral part of life, build every day from birth to death reflecting the capacity that each person has to carry out a health project, a commitment to existence (Lucília Nunes, 2013).

Health is an area of multidisciplinary intervention that aims to provide answers to people's needs. No professional group can provide a complete response to health on its own. The paradigm for thinking about human beings and their health has changed. We are in a phase of paradigmatic rupture, increasingly away from the days when the centre of attention was the medical professional.

Today, there is a great variability in the contexts in which care is provided, which reflects people's diverse needs at various levels of prevention and treatment, requiring qualified professionals with different backgrounds, both in the coordination and composition of healthcare units.

In a time where the One Health systems have been emerging consistently and where the One Health needs to move beyond the traditional scope public health to include and to mobilize other professional groups (Ferrinho P. & Fronteira I., 2023, p. 5) TCM as an holistic health dialectical system can be the link and the binding cement between the different theories of traditional and modern scientific health systems and between individual health and the multiple contextual circumstances influencing it.

The aim of this article is to summarise the main characteristics and foundations of the TCM paradigm in order to promote a deep interaction between cultures and health systems and contribute to the rethinking of human resources

for health. Which means bridges of health knowledges and exchanges between countries and civilizations.

1. Traditional Chinese Medicine Theoretical System

Traditional Chinese Medicine was born from the accumulation of thousands of years of clinical practice expertise that allowed the development and accuracy of its Theoretical System and of its contribution to the health of all human beings in our present World (Wu Minhua, 2006).

TCM is a scientific paradigm with a coherent, recognized body of knowledge with controlled effective practices.

Thomas Kuhn T.S. (1962, 2009) states that to know a Science it is important:

- To know its practice, its functioning and its mechanisms.
- To understand the scientist's behaviour, attitudes and decisions.
- To uncover the cultural background vision of the world of each specific scientific community and the resulting specific object or "scientific reality".
- To recognize that different scientific paradigms can't be translated into each other, only cooperate in practical objectives, under special conditions, while keeping their own specific integrity and functional identity.

It was from the understanding of the scientist's culture, attitudes, expectations and practice that Thomas Kuhn further unveiled the internal mechanisms of a science.

TCM is a recognized body of knowledge with millennial efficacy practices and a coherent theoretical core that are consistent with Chinese culture. From this common conceptual ground emerge a broad range of chinese medicine practices including various forms of herbal medicine, acupuncture, massage (Tui Na), exercise (Qi Gong and Tai Ji), and dietary therapy.

In fact, a theoretical paradigm is deeply rooted in the worldview that originates it, its values and convictions. Furthermore, a large part of the answers a paradigm can deliver, including scientific ones, are already contained in the correspondent questions, limited as they are to those that the paradigm itself allows.

Western culture questions about linear and quantitative causal relations between separate beings and objects lead to the discovery of mechanistic laws within a universe that appears as a gigantic mechanical device. ΚΘ

Eastern culture questions concerning relationships of affinity, dynamic interdependence, articulation of rhythms and systemic functionalities lead to the conception of the universe as a harmonic systemic organism and orients thought towards the discovery of the laws compatible with this perspective.

"As to the great debate between continuity and discontinuity, as such, Chinese organic philosophy could not but be drawn to continuity ... His universe was a continuous medium, a matrix within which things act upon each other, not by virtue of the clash of atoms, but by virtue of radiating influences. It was a cosmos of waves, not of particles. And so it is that one of the great halves of modern physics also owes its origins to the Chinese." Joseph Needham (1974, p119)

"We are led to a new notion of a discontinuity-free totality that denies the classical idea of the analysability of the world into parts existing separately and independently. Rather, we see that the unbreakable connectivity of the quanta of the whole universe is the fundamental reality and that the parts with relatively independent behaviour are merely particular and contingent within the whole." (Bohm D., as cited by Capra, F. p. 24).

Science operates with *constructed* scientific Objects – in fact, it alludes to Reality but also deludes it:

- Real Object The one we don't know what it is, because we capture only part of Reality
- Perceived Object Object as we perceive it through our senses, with or without the aid of instruments
- Constructed Object The object constructed by each science with its own set of values, concepts, instruments and methods.

Sciences are cognitive instruments that operate on this "reality" they previously build, their own constructed, evolutionary, research object:

- They are processes;
- They do not always operate with the same concepts and instruments;
- They are not fixed on a representation of reality, considering it definitive and absolute;
- They have an ongoing perennial dynamic in which cultural, subjective and objective
- factors interact dialectically.

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Chinese Medicine theory was originated from the thought processes of the ancient chinese that includes, among others, the theory of qi-based monism, yin yang and five dynamisms, that have a profound influence on TCM medical practice. These basic axioms are not simply world view elements hiding in the background, but cognitive important instruments and methods to conceptualize and operate on the reality not only to achieve clinical results but also to reach the "the unity of heaven and earth" and observe how "heaven" (the whole universe with all its myriad aspects) influences humankind.

TCM is a science born from clinical practice and human experience and from the continuous interaction between four Axes

- Axioms of the TCM theoretical paradigm rooted in Chinese culture and philosophy
- Observation and interpretation of the patient TCM clinical diagnosis
- Patient-centred clinical application Treatment strategy based in the patient context
- · Adjustment of treatment to the functional responses of patient
- Theoretical-practical improvement according to experience and axioms

The research and theoretic development of TCM started from the clinic, and always returned to the clinic to confirm its achievements and develop new strategies. The TCM clinical diagnosis and its therapeutic system have been in constant development, standardization and regulation according to the improvement of new resources and scientific developments.

The content of Chinese Medicine methodology is extremely rich and multi-leveled. Under the guidance of the above-mentioned axioms, Chinese medicine uses the methods of "proficiency in reading external signs to make conjectures about the internal condition", "taking an object and comparing across categories", "direct apprehension and insight", and "discrimination of the unusual from the normal" (Chen M., Paul F. R. & Zhou G. 2019, pp. 10-19)

TCM cognitive operation is based on the interaction between humans and nature "by the approach of getting truth through practice" and illuminated by a holistic thinking mode in constant motion, including modelling thinking, analogical thinking, holistic thinking and dialectic thinking. TCM evaluates the human health considering the functional status of human body, being at the same time an holistic person-oriented, nature-oriented and health oriented medical science,

laying emphasis on the maintenance of people's health and prevention of the disease (Gao Sihua 2009).

However, under the influence of modern evidence medicine research, the comprehensive technical system of TCM is sometimes separated into simple, unconnected techniques and approaches that lost consistency with TCM theory and clinical practice, its holistic background and its individualised diagnosis. However, today we are witnessing various initiatives to develop research methodologies and statistical data processing that respect the TCM paradigm.

2. Main features of the theoretical paradigm of Traditional Chinese Medicine

TCM has a paradigm different from conventional medicine. By paradigm we mean laws, theories, applications, instruments and beliefs that provide models giving rise to a "particular tradition of coherent scientific research shared by an independent scientific community" (Kuhn T.S. 1962).

2.1. TCM is a Systemic Paradigm

The systemic paradigm recognizes the predominance of the whole over the parts and considers its objects in the coherent and comprehensive form of a network of relations.

In this perspective, the classification "concrete reality" is only applicable to the whole system, each part being only a functional link in the global functional network. The parts or units of an organic whole, approached in themselves, are mere abstractions because they cannot be fully considered outside their relations with the concrete totality to which they belong (abstracted – extracted out of).

Thus TCM, as a systemic medicine, deals with concrete reality, the specific wholeness of each individual patient, avoiding as much as possible analytic and reductionist approaches that deal mostly with such abstractions.

Examples:

In the Zang Fu or Organs theory the five main organs belong to a single interdependent circular system: each organ depends on the dynamism of the previous one and controls the dynamism of the second next. The human being is an organic whole and the organs and tissues that constitute that whole are connected structurally and functionally. The organs mutually coordinate functionally and are interdependent in their pathological dynamic. The five organs are also a unity of ΚO

form and spirit, each one rooting one the five basic human emotions. Harmony of both form and spirit is an indication of health, while its loss is a sign of disease.

Heaven refers to nature and the meaning of "heaven and humankind unite into one" is that humankind and nature are a unified whole. Humankind is a phenomenon in this universe and all the other phenomena between heaven and earth are generated and completed from the same source.

TCM systemic paradigm has a clinical focus. Not all the elements of the system surrounding the patient have the same relevance or centrality. The patient and his dynamic health process are the centre, the organizing factor of the systemic complexity surrounding him.

In TCM theoretical system, most aspects/relations of subjective and objective life can be clinically used for etiopathogenesis, diagnosis and prevention/recovery strategies. This means that in TCM there is no evidence without context, because evidence is always used in the concrete context of the patient. The TCM specialist listens to his patients and in dialogue observes and accesses their mental attitude, spiritual background, professional, social and environmental context, lifestyle, diet, constitutional type, general health condition and physical activities.

Traditional Chinese Medicine (TCM) is an ancient medical practice system which emphasizes regulating the integrity of the human being and its interrelationship with natural environments. As a key concept in TCM, Zheng (meaning syndrome or pattern) is the overall physiological and/or pathological pattern of the human body in response to a given internal and external condition, which usually is an abstraction of internal disharmony defined by a comprehensive analysis of the clinical symptoms and signs gathered by a practitioner using inspection, auscultation, olfaction, interrogation, and palpation of the pulses. (Wang Y. & Xu A., 2014, p. S13)

2.2. TCM is a Phenomenological Paradigm

Phenomenon (in the Kantian sense) is that which perception captures spontaneously:

- TCM "reality" is considered and studied as it is presented to the senses;
- TCM looks for laws and meaningful relationships without the use of instruments;

- TCM practitioners observe human functions and their manifestations exhaustively.
- TCM phenomenological approach produces scientific concepts very close to human experience and common language, allowing, in most cases, to explain these scientific concepts and their application to life to the layman patient during consultation.

COMMON LANGUAGE LIFE STYLE PRESCRIPTION

TCM Clinic and Education for Health

(Phenomelogical concepts are easier to explain)



According to TCM, many pathologies are made possible by Emotional and Life Style wrong options, that weaken immunity and homeostasis (Systemic approach)

In the perception of phenomenology, the associations and relations between diverse phenomena are the key points to understand reality and these associations can be acquired by summing up experience and summarizing experimental facts.

Phenomenology refers to the system theory which analyses, induces and summarizes the essence of things by the phenomenon, which happens to be consistent with the thought of TCM (Yan E., Song J., Liu C. and Hong W. 2017, p. 2).

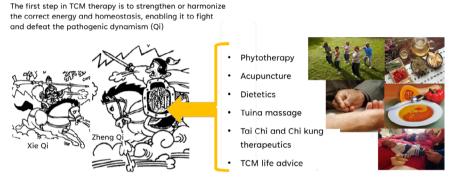
2.3. TCM is a Dialectic Paradigm

TCM uses dialectical logic rather than the Aristotelian logic typical of Western science. The basic principle of western logic is that a *thing is what it is* (A=A), leaving its eventual transformation and context dependence without correspondence in the field of logic, that frames both the thinking activity and the world view. On the contrary, TCM paradigm uses dialectic thinking to understand transformation, movement and contradiction in reality:

All things and processes have their opposites (A = A+nA) Opposites fight and complement each other (A=A or nA) and (A=A and nA) The interaction of opposites generates constant transformation (A=A+nA)= nA All processes may have qualitative leaps (A+A=nA)

So, the first step in TCM diagnosis is to understand the condition and relative strength of the opposites correct energy and pathogenic energy.

Xie Qi, the Pathogenic Dynamism (Qi) and the Zheng Qi, Correct vital energy and homeostasis. This is a main clinical pair of opposites.



The first step in TCM therapy is to strengthen or harmonize the correct energy and homeostasis, enabling it to fight and defeat the pathogenic dynamism (Qi) with Phytotherapy, Acupuncture, Dietetics, Tuina massage, Tai Chi and Chi kung therapeutics, TCM life advice.

All things and processes have opposites complementing each other as we can observe in the following clinical example. In TCM this complementation explains the "treatment by the opposite", when an element is used to control the unbalance of its opposite.

Clinical example

Menopause often presents agitation and excessive dynamism with heat flushes. Does this seem like an excess of Yang (dynamism), an increase in natural dynamism?

Clinical experience shows that in most cases it is a lack of Yin, the opposite of Yang, which can control and moderate it.

Therapeutic strategy – The therapeutic strategy is not to diminish or sedate the normal yet uncontrolled dynamism, but control it by reinforcing its complementary opposite: nurturing the Yin which will control the Yang

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In TCM approach the capacity of the interaction of opposites to generate transformation can be used in different domains, other than its direct application to body functions. Conjugating dialectic with systemic approaches, therapeutic action can go out of the consultation room and enter the life of the patient, aiming at favourable changes in his life context.

Clinical example

A patient complains of emotional and psychosomatic disturbances caused by a difficult relationship. Is the relation blocked? Are we going to limit our scope to the patient's actual psychosomatic discomfort?

Therapeutic strategy – The dialectic perspective of TCM shows that in everything the interaction of opposites can bring about transformation. In this case, the patient can be stimulated to faithfully cultivate the dialogue with the other person, as opposites interacting and generating transformation, with the aim of unblocking the relationship and taking it to another level. It is advisable to share with the patient the dialectic vision that even when there is opposition everything can be transformed and improved.

The recognition and easy conceptual framing of the possible presence of qualitative leaps is another dialectic characteristic of TCM paradigm and a relevant part of the "adjustment of treatment to the functional responses of patient". Paradoxical developments in the evolution of diseases are not unusual, especially when some condition reaches its extreme expression:

According to the Nei Jing 'There must be rest after an exaggerated movement, an excessive Yang will become a Yin". When a certain limit is reached, the change in the opposite direction is inevitable. This is what the formula refers to: "From extreme Cold is born Heat, from Extreme Heat is born Cold". The quantitative change leads to a qualitative change. This is not a simple transformation, but a real transmutation. (Auteroche B. & Navailh P. 1982)

When a specific factor is present in the clinical picture of a pacient, quality refers to the identity of the factor and, whitin certain limits, its quantity is not relevant, not essential. Points of discontinuity may appear when the quantity increases

and becomes incompatible with the function of the factor in his systemic context. This circumstance may then lead to its transformation in its opposite.

"In becoming, quality lasts, is prolonged, is repeated; it remains the same in the course of a gradual quantitative growth. ... Nevertheless, becoming will at a certain instant become more abrupt, more brutal; after a relatively calm quantitative growth, it will abolish at one stroke the unity thus constituted, replacing it brutally by something else." (Lefebvre H.,1969, p. 211)

2.4. TCM is a Functionalist Paradigm

TCM observes dynamisms and syndromes of functional imbalance in human beings.

To TCM, the organic functions and the multiple networks of these functions control the anatomical and physiological aspects of the body. Qi, or *energy*, evaluated by TCM in its quantity and quality, is the concept applied to the dynamic factor behind every organic function. Qi means dynamism in the sense of dynamism that produces work, action. The main TCM clinical strategy is to act upon this dynamism, as expressed in the different organic functions.

According to historical data, dissection was known by ancient Chinese thousands of years ago. But the interest in physical anatomy has always been limited: chinese traditional culture and TCM paradigm consider that reality is mostly a set of dynamic interactive processes in constant transformation and not a collection of objects and beings predominantly material, stable and autonomous. Body organs are stabilized cycles of multiple dynamisms, aggregations of energy, immersed in larger fields of dynamic energetic functions.

These functions, always expressed by specific signs and symptoms, are the clinical focus of TCM. They are different from western body functions but apt to explain all their alterations and indicate forms of intervention. As a whole, they are a coherent network animating and controlling organs and tissues, as a well-defined "second body" of dynamic energy acting inside the more stabilized energy of the material body.

2.5. In TCM paradigm health is an Individual and Unique Process

Health is an individual human being process that is intimately related to its internal and external environment. During the long journey of living the human organism has developed a good balance ability not only to adapt to the surroun-

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ding environment but also to the changes of the seasons and their variations that manifest with physiological changes in the body. But human being can also actively adapt and adjust to the internal and external variations changing one's diet, sleep patterns and work patterns accordingly. Because is only by working in harmony with the own environment and health circumstances that one can better protect and nurture one's life (forces), increase and strengthen healthy qi, and protect one's health.

The excess and deficiency in vital processes refer to the individual standard of balance. The reference standard for measuring the ideal organic functional quantities and qualities, for any human being, is his overall state of health and the consistency of progress in that direction.

All the multiple aspects of human life can contribute to the balance of health. But it is always a complex and strictly individual equation, sometimes with unexpected features. Health is an Individual Balance Process and Health is accessed by the individual functional State.

TCM diagnoses the physiological and pathological state in human body through the recognition of its general functional status. Therefore, in judging the diseases and evaluating its curative effect as well, traditional Chinese medicine stresses the importance of the patient's functional status, holding that the standard for recovery is that the function of the body returns to its normal level and the patient is supposed to feel at ease. (Gua Sihua, 2009, p. 52).



TCM – One Health System Centered in the Individual Health Process

3. TCM – a medicine in One Health concept

The One Health concept is defined as the collaborative effort of multiple disciplines who work locally, nationally and globally to attain optimal health for people, animals and our environment (as cited by Ferrinho P. & Fronteira I., 2023).

According to these authors the scientific roots of this concept can be traced back to Hippocrates in occidental medicine but the adoption of a One Health nomenclature in the published literature is recent, dating only as far back as 2004. The capacity to successfully address threats to human, animal, and environmental health requires an adequate workforce and this building capacity and workforce development within a One Health framework remain challenging for many reasons pointed out by these authors (Ferrinho P.& Fronteira I., 2023) and needs a continued and systematic coordination of the One Health workforce development process.

TCM is a medicine of the Integrated Human Being so it is prepared to participate in the workforce development pointed out by these authors since it is a medicine people-centered care that adopt the advances in human and nature sciences, including new technology to clinical practice. This includes namely the patient global and deep observation and interpretation and the patient-centered clinical application and adjustment to the it's functional responses, perspectives and context. So, the TCM paradigm clinical methodology is oriented to the systemic wholeness of the patient.

Health Education Health Professionals Develop an efficient specialization and correct One Health Work Force understanding of the different Capacity to improve areas of intervention in Health care system Participate in the Health Work Health Force to Improve Health for Detect situations requiring human, animals and nature Responsiveness other health care intervention, emergency and urgent care Efficiency Increase response to outbreaks Decrease the financial cost of outbreaks Improve system efficiency through collaboration and communication

TCM CONTRIBUTION IN ONE HEALTH SYSTEM

Besides that, TCM is a medicine people-centred that is able to function in multi-disciplinary teams and create a positive environment and work culture, manage complex personal relations and participate in the resolution of complex task as is needed in this workforce.

The founding principle of TCM is that humans are one with nature and universe and that good health results from finding balance with our environment. TCM with

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a long experience of people centred care can contribute for a new rethinking of human resources for health in a new technically complex environments requiring skills for handling complex tasks.

TCM with a long experience of evaluation and integration of knowledge from different disciplines and areas of knowledge in improving patient health can contribute to improving the efficiency of the One health system.

References

- Auteroche, B., & Navailh, P. (1992). *O Diagnóstico da Medicina Chinesa*. São Paulo: Andrei Editora.
- Capra, F. (2006). O Ponto de Mutação. S. Paulo: Ed. Cultrix 26.
- Chen, M., Paul, F. R., & Zhou, G. (2019). Chinese Medical Classics: Selected Readings. International Standard Library of Chinese Medicine. People's Medical Publishing House (pp. 10-19) ISBN 978-7-117-18931-6.
- Ferrinho, P., & Fronteira, I. (2023). Developing One Health Systems: A Central Role for the One Health Workforce. *Int. J. Environ. Res. Public Health*, *20*, 4704. https://doi.org/10.3390/ijerph20064704
- Gao, S. (2009). Suggestions on Personnel Training and Education of Traditional Medicine. *World Education of Chinese Medicine*, *3*(4), 51-54.
- Kuhn, T. S. (1962) *The Structure of Scientific Revolutions*. Chicago: The University of Chicago Press.
- Kuhn T. S. (2009). A Estrutura das Revoluções Científicas. Lisboa: Ed. Guerra e Paz.
- Lefebvre, H. (1983). *Lógica formal/Lógica dialética* (3.ª ed.). Rio de Janeiro: Editora Civilização Brasileira.
- Needham, J. (1974). *La tradition scientifique chinoise*. Paria: Ed. Hermann.
- Nunes, L. (2013). Responsabilidade do Profissional de Saúde esfera de ação, enquadramento(s) e contexto(s). In *Curso Complementar de Direito da Saúde* (pp. 15-40). Lisboa: Centro de Estudos Judiciários.
- Wang, Y., Xu A. Zheng (2014) A systems biology approach to diagnosis and treatments. The Art and Science of Traditional Medicine. Part 1: TCM Today – A Case for Integration. Science, 346 (6216), S13–15.
- Wu, M. (2006). *Nanjing International Forum of Chinese Medicine*. New Thoughts and Approaches to the Future Development of Traditional Chinese Medicine. Nanjing: NUTCM.
- Yan, E., Song, J., Liu, C., & Hong, W. (2017). A research on syndrome element differentiation based on phenomenology and mathematical method. *Chinese Medicine*, 12(1), 12-19.