

Contributions of anthroposophic medicine to integrality in medical education: a hermeneutic approach

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The aim of this study was to identify possible contributions from the work of the founder of anthroposophic medicine, Rudolf Steiner, to integrality in medical education. This was a hermeneutic study along the lines indicated by Gadamer, on the courses and lectures on medicine given by Steiner. Four main summarized proposals regarding his thinking are presented: (1) a critique of the model of materialistic science that can be expanded through Goethean phenomenology; (2) anthroposophic threefolding and fourfolding as interpretative keys for the health-illness process; (3) integration between human beings and nature as the foundation of research on new treatments; and (4) the link between moral development and scientific and technical training in medical education. The limits and potentials of these proposals were analyzed from the perspective of the viability of epistemological plurality within medical knowledge and practices.

Keywords: Medical education. Integrality. Hermeneutic. Steiner. Anthroposophy.

Introduction

In the last ten years, integrality has been a frequent research theme in the area of professional health education¹⁻⁷. Recognized as a target image or regulative ideal⁸ among the constitutional principles of Brazil's National Health System, integrality has been showing that the subjective and social dimensions should be viewed as constituting the know-how in the area of health. This potential makes the search for integrality become a device that has promoted curricular changes and innovative experiences in professional health education, including, in teaching-learning contents and methodologies, theories and practices that are able to discuss the experiences of the subjects involved in the working process, their life histories, affections, and personal and collective projects. In addition, analysis and intervention concerning the historical, social and political determinants of the health-disease process are conducted^{5,6}. One of these

resources targeted at integrality, and the main object of the present study, is the inclusion of complementary and alternative medical rationalities in medical education⁹⁻¹¹.

Medical rationality is a conceptual tool developed by Luz as a Weberian ideal type¹². It is a category that represents a theoretical model that contains the fundamental elements to the recognition of a complex and singular medical system. A medical rationality is an articulated set of knowledge and practices that has six interconnected dimensions: a morphology (equivalent to anatomy in the biomedical rationality); a vital dynamics (physiology); a medical doctrine (which explains what is health, disease and the origin of these conditions); a diagnostic system; a therapeutic system; and a cosmology, a sixth dimension that presents the worldview that provides the basis for the previous dimensions¹³. Luz and collaborators have already identified five medical rationalities: biomedicine or contemporary Western medicine, which nowadays occupies a hegemonic position compared to the others; homeopathy; traditional Chinese medicine; Ayurvedic medicine; and, more recently, anthroposophical medicine^{14,15}.

According to Tesser and Luz¹³, medical rationalities which are considered alternative, complementary and/or integrative, such as homeopathy, Chinese and Ayurvedic medicine, particularly favor integrality in the area of health. In these rationalities, integrality is a presupposition and a principle that articulates their knowledge and practices. The expertise of their professionals includes diagnostic and therapeutic tools, and also doctor-patient interaction tools, all of which translate this principle into practice. Some examples are: the interdependence between the psychic, spiritual and organic dimensions of the health-disease process; the indispensability of understanding and interacting symbolically, in the perspective of their cosmologies, with important aspects of the patient's life history, and with his/her cultural and social context; the use of treatments that search for a dynamic balance between the human microcosm and the universal macrocosm. In the case of contemporary Western medicine or biomedicine, integrality is a need that comes *a posteriori*, in order to overcome consequences derived from its mechanistic understanding of the process of getting ill and of the selected therapy. Some of these consequences are the excessive instrumentalization of the healthcare practices, the impoverishment of the relationship between professionals and patients, and the fragmentation of the approach into multiple specialties and professions.

In this work, we developed a theoretical research into possible contributions of anthroposophical medicine, a medical rationality that has been recently analyzed by Luz and Wenceslau¹⁵, to integrality in medical education. The seminal works of anthroposophical medicine were analyzed: the courses offered by its founder, Rudolf Steiner, to doctors and medicine students¹⁶⁻¹⁸, as well as other courses open to the general public about medical themes^{19,20}. These courses were the starting point of the trajectory of this rationality and they contain indications not only to the development of the diagnosis and therapy in this system, but also to medical education in general. Anthroposophical medicine is viewed as complementary to the contemporary Western scientific medicine and, in Brazil, it is recognized as a medical practice. It integrates the National

Policy for the Integrative and Complementary Practices and is present in Brazil's National Health System in many cities, especially in the Southeastern States of Minas Gerais and São Paulo²¹.

The approach adopted in the present study is philosophical hermeneutics; more specifically, the proposal developed by Gadamer in his work *Truth and Method*²². Analyzing especially Schleiermacher's and Hegel's studies about the possibilities for understanding a work, Gadamer mentions the performance of two fundamental hermeneutic tasks: *reconstruction* and *integration*²². Reconstruction, emphasized by Schleiermacher, is the effort to recompose, with the highest fidelity, the original state of creation of the work in question, reaching the author's ideas and intentions that permeate his text. According to Hegel – and Gadamer agrees with this position –, reconstruction is part of hermeneutics, but it should not end at this stage. A perfect reconstruction of the past in the present, due to the very limits of the human historical condition, is impossible to us. However, the main task of understanding, in Hegel's perspective, is the mediation between past and present. Apprehending the meaning of a work does not mean restricting it to a distant or obsolete time; rather, it means shedding light on the differences and affiliations between current thought and traditional thought. Understanding the past implies asking what characterizes our current condition and establishing, inevitably, new horizons of possibility to the present.

Thus, the present study is divided into two parts. Firstly, we present a synthesis of Steiner's main indications for medical education and practice, as a strategy to fulfill the task of *reconstruction*. Then, we attempt to mediate between Steiner's positions and issues that permeate a medical teaching based on integrality, thus attempting to fulfill the objectives of *integration*.

An amplification of the art of healing

Within the limits of a paper, we decided to systematize Steiner's suggestions in four propositions. These propositions express contents that were recurrently approached in his lectures and courses about health and medicine; however, the examples he used in order to demonstrate their practical application varied.

First proposition: The hegemonic science model is insufficient for the learning of a medicine that approaches the human being in his integrality and it is necessary to develop a new proposal for scientific approach that amplifies the current one and favors, in medical education, an integral understanding of health and disease conditions.

Steiner's main criticism of modern scientific medicine is that it is restricted to the analysis of information obtained only by the physical senses¹⁹. To better understand the meaning of the criticism raised by the founder of anthroposophy, it is necessary to contextualize briefly his historical-cultural moment. Steiner lived between 1861 and 1925. In 1882, he started his first professional activity, as editor of the scientific work of the German poet Johann Wolfgang von

Goethe²³. This period of approximately four decades during which he developed his broad intellectual, artistic and social activity, characterized by the investigation of many different themes, was strongly marked in the academic world by a classical epistemological debate between materialistic and idealistic positions²⁴. While materialists defended that knowledge should come only from research into phenomena captured by the physical senses, idealists stated that knowledge and reality are experiences of the human spirit and that their authentic understanding would only be possible through a non-empirical, reflective and philosophical study of this subjective human universe, as it is something that cannot be verified with the physical senses. Steiner positioned himself as an objective idealist²³, postulating that, although it is not possible to study the spiritual dimension both of the human world and of the natural world only with the physical senses, it would be possible to develop a complementary knowledge pathway that would be, at the same time, spiritual and objective²⁵. For this, he used Goethe's nature studies²⁶. According to Goethe, through disciplined observation, without judgment, of the physical world, it is possible to recognize, in an intuitive way and beyond singular expressions, the archetypal spiritual foundations of reality. Taking these principles as the basis for his research, Goethe developed studies in the areas of mineralogy, osteology, optics and botany^{27,28}. Some of his main achievements were the discovery of the human intermaxillary bone, his color doctrine²⁹, distinct from Newton's theory, and his analysis of the development of plants from a primordial type, published in the work *The Metamorphosis of Plants*^{30,31}.

Steiner amplified Goethe's method and took this methodology to the fields of the arts, philosophy, psychology, history, and anthropology, creating his own approach, which had particular traits: anthroposophy^{26,32}. When he applied these principles to issues related to the human being's health and diseases and to possible therapeutic interventions, he founded anthroposophical medicine³³.

It is important to highlight that Steiner was not against the results and research methods of scientific medicine; he just considered them partial and insufficient to the development of adequate therapeutic offers to the human being as a whole, as human beings also have a spiritual quality or dimension^{(d)19}. The spirit is described as an element that enables both an experience of knowledge that takes thoughts and ideas as objects of study and as a free action that is coherent with knowledge acquired about its nature and the world³⁶.

^(d) The recognition of a spiritual dimension as a constituent of health is a current theme that has been the object of an increasing number of studies and practices, based on several epistemological perspectives³⁴. Its inclusion in governmental healthcare strategies has been recommended by the World Health Organization since 1984³⁵.

Second proposition: The human conditions of health and disease can – based on the results of this amplified scientific approach – be studied with an interpretive key of three systems – three-folding – and four bodies – four-folding.

This proposition contains the principles of the anthroposophic understanding of health and disease conditions: three-folding^{19,37} and four-folding^{19,37,38}. Steiner conducted an analysis of human physiology in which he describes two sets of elements that explain the dynamics of the functioning of the organism³⁹. The first set is called three-folding and it links the functioning of the different organs of the human body to three systems: the neurosensory system, related to the neurophysiologic activities of perception and conscience; the metabolic-motor system, associated with movement and digestion of nutrients; and the rhythmic system, which has, in a balanced way, characteristics of the two other systems. The systems are not a fragmentation of the organism; on the contrary, it is possible to observe the three qualities in all the cells and tissues of the human body; however, they may predominate over one another, as there are organs and regions that are more neurosensory, rhythmic or metabolic²⁰.

The second set of qualities is called four-folding and is used to gather qualitative patterns of reality which Steiner calls bodies, but which have also been referred to in anthroposophic texts as organizations or levels. In the anthroposophic view, the human being is constituted of four bodies: the physical body, which translates our materiality and through which we are submitted to the laws of physics and chemistry; the etheric body, which accounts for our condition of being a living organism and for the processes related to life, like growth and reproduction; the astral body, which is responsible for the state of being awake, for the formation of a small, singular universe of sensations and reactions that interacts with the surrounding world; and the organization of the self, which provides the human being with the experience of self-conscience and of being able to act in an unconditioned way, that is, in a free way³⁸.

Health, in anthroposophy, is enabled by a dynamic balance of these three systems and four bodies, which are intertwined in the human being. Becoming ill is a process of unbalance in which the qualitative patterns of each one of these systems interfere in one another so as to generate disharmony³³. For example, migraine is interpreted by Steiner as an excess of metabolic forces in a region in which the neurosensory system, the head, prevails¹⁹.

Third proposition: this new scientific approach can also be used for the teaching-learning of new treatments that result from a more harmonic relation between human being and nature

The third proposition refers to the therapeutic possibilities that emerge from this amplified view of the health-disease process. According to Steiner¹⁶, "Our understanding of the nature of a disease should be capable of providing us with insights concerning the process of how to heal this

disease". In the anthroposophic view, these qualitative patterns that associate tendencies of catabolism vs. anabolism, growth vs. atrophy, consciousness vs. unconsciousness, among others, are present not only in the human being, but in the entire nature. The human being is a microcosm inside a macrocosm and both share the same forming principles¹⁵. Thus, it is possible to research, in the natural world, elements in which unbalanced qualities or characteristics in the human organism are present. An example that is frequently cited by Steiner^{19,40} is the relation between the main segments of a plant – root, leaf and flower/fruit – and the three systems – neurosensory, rhythmic and metabolic-motor. Therefore, different parts of a plant, like chamomile, for example, are used with different purposes: as a sedative for anxiety states, the tea made from the chamomile root is indicated, while as a medicine for cramps, the warm compress from chamomile flowers placed on the abdomen⁴¹.

Fourth proposition: the proposed scientific methodology demands an introspective work of the professional and the personal appropriation of this scientific methodology is inevitably intertwined with the development of certain moral qualities.

The fourth and last proposition refers to the educational process that is necessary to develop a medical know-how that is coherent with this amplified understanding. To Steiner, in addition to conventional scientific education, the professional must develop this phenomenological view of nature and of the human being¹⁷. The first practice that he indicates with this purpose is an observation that is contemplative, disciplined, with as many details as possible, regarding phenomena or elements of nature, and also human physiologic and psychic processes. Following Goethe's orientations for nature research, dedication to this kind of exercise gradually allows the observer to contemplate an image that translates the fundamental qualities of the phenomenon in question and, through the analogy that was mentioned above, it is possible to establish therapeutic proposals. The second practice pointed by Steiner is that of concentrating the attention on certain images indicated by him through sentences or sets of verses, with the aim of strengthening the extended cognitive capacity of its practitioner¹⁷. Similarly to Eastern philosophic traditions⁴², he considers this type of practice as meditation. Steiner highlights that such exercises imply not only an understanding of this spiritual dimension of reality, but also the development of a moral attitude of admiration of and dedication to nature and also to the human microcosm. The doctor or medicine student engender an attitude of personal commitment to the search of the best possible care to the patient, as they recognize in the patient not only a set of biochemical reactions, but the presence of an individuality that expresses in a mysterious way a reflection of the entire universe.

How viable is epistemological alterity in medical education?

As mentioned above, the second task of the hermeneutic exercise is integration, that is, a reflection on the possible contributions that an author's work, even though it was written decades or centuries before, may bring to significant issues of the present²². This task, in the Gadamerian approach, aims to establish a dialog with the text in question. To achieve this, one of the possible resources is to explore the questions that the author intended to answer with his work, rather than criticizing directly his suggestions. The second methodological alternative would provide a very small contribution to the present, as the historical dimension of human experience makes the answers that the author found be conditioned to the past, to the context lived by the author. In this study, it is worth asking: What questions support the propositions that we created based on the medical work of Rudolf Steiner?

When Steiner launched the principles of a medicine amplified by anthroposophy, he explained many times that he was concerned about constructing therapeutic offers that were increasingly efficient in mitigating the human being's physical and mental suffering. According to this Austrian philosopher, however, an answer to this concern, which must or at least should permeate any process of investigation or education in medicine, depended on the inclusion of dimensions of the human being that cannot be reduced to or translated only into material and quantitative terms. Like Freud, Husserl and Dilthey, to cite classic examples in this search, Steiner tried to develop a theory and a method of investigation of reality that is adequate to the issues of the human spirit⁴³. Nevertheless, his singularity is related to developing a unique method both to the human spirit and to the natural world, by considering, like the Eastern philosophies, holism as the organizational principle of reality. In the anthroposophic cosmovision, every material reality expresses a spiritual reality, or, as Goethe put it: "matter neither exists nor can it ever be efficient without spirit, nor the spirit without matter"²⁸. In Steiner's time and, in a certain way, to the present day, one solution found to the impasses between materialism and idealism, objectivism and subjectivism in the sciences was that of having specific methods for research in the human sciences (qualitative methods) and others for the natural sciences (quantitative methods). However, since Hippocratic medicine, health and disease had been a research theme in which this delimitation was not so simple to identify.

Nevertheless, the first decades of the 20th century indicated a direction to research and knowledge production in medicine: the progressive exclusion of the humanities from its body of knowledge and the hegemony of a model of knowledge production based on the objectivity of measurable and quantifiable data⁴⁴. Thus, Steiner questions two important pillars which predominate to this day in knowledge production in the area of medicine: the need to use different research methods for the universe of human sciences and natural sciences and, consequently, the hegemony of the methods of the natural sciences in medicine research. Therefore, it is relevant to

question how a standpoint that apparently is so anachronistic to our understanding of science like that of Steiner can contribute to integrality in medical education.

According to Fleck, Kuhn and Feyerabend, the place that a certain conception of knowledge occupies among the intellectuals of a society is not determined scientifically^{13,45,46}. It results from consensuses that are established fundamentally through power relations that involve values, interests and priorities – winners or losers - of a given time. These consensuses involve not only the intellectuals, but other individuals and groups that also have political and economic power. This understanding allows us to analyze that the hegemony of modern science is not innate to it; rather, it depends on its capacity, as a method of intervention in reality, for meeting certain interests that are valued in the present. The predominance of science and of a certain way of making science as the basis of medical knowledge is, in this perspective, something that can be questioned, especially from a standpoint of analysis of the power structures that support this predominance⁴⁷. This criticism enables us to think about in what way other methods that are allegedly scientific, such as Steiner's anthroposophy (although they do not have recognition or space in the current scientific *status quo*), might contribute to medical education, specifically if it is viewed in the perspective of integrality. In the debate regarding integrality in the education of healthcare professionals, it is recognized that a model of mechanistic science – a model restricted to measurable and controllable information – is insufficient as the cognitive basis of the education of healthcare professionals³. However, as their starting point is the split between natural and human sciences, that is, an understanding of Cartesian traits separating *res cogitans* from *res extensa* - a non-holistic comprehension of reality -, the option that is more frequently adopted is that of interdisciplinarity: the perception of a feature of the health-disease process in the perspective of different knowledge methods (of the human or natural sciences) that can be joined *a posteriori* to construct a picture that is as integral as possible of that situation¹³. Holistic conceptions, like that of anthroposophical medicine and other medical rationalities, enable us to perceive our experience of the world as inseparable from reality itself. This possibility has been brought to the contemporary scientific debate by authors like Varela and Maturana, among others, whose epistemological posture has been called *co-constructivist* because it argues that "the living beings and us, men, co-create a world in our interaction with nature, which [...] transforms itself together with us"⁴⁸.

The teaching of an alternative and complementary medical rationality like anthroposophy opens this possibility of approaching integrality in medical education: the teaching and learning of holistic forms of understanding and interacting with the health-disease process. The inclusion of the theoretical principles and of the practical teaching of an alternative and complementary medical rationality like anthroposophical medicine has, as its first practical consequence, the expansion of the doctor's collection of tools, with the inclusion of other resources of interpersonal communication with the patient and of other diagnostic and therapeutic resources that do not belong to the biomedical rationality. In the case of anthroposophical medicine, we could cite the inclusion of anamnesis guided by the conditions and interrelations among the four bodies and three

systems³⁷, the inclusion of the perspective of getting ill into an existential meaning to the patient through the septennium biographical approach⁴⁹, anthroposophic medicines, rhythmic massage, artistic therapy, among others. Similarly to what has been evaluated for homeopathy^{50,51}, the potential of these tools is that they expand the integration of the subjectivity of doctors and patients in the health work, making medicine be more than a science of diseases: a set of different types of knowledge in favor of care provided for people.

It is possible to observe, however, that a medical rationality does not signal only a path to complement biomedicine with touches of humanization or to give answers to pathological conditions for which this hegemonic rationality is not efficient. This teaching enables the student to discover that there are deeply different ways of thinking, validating and practicing medicine and that, for political, historical and ethical reasons, one of them is hegemonic today, but this does not mean that one of them is necessarily the true one, better than the others. This status is given to one of them for non-scientific reasons. Understanding that there are different forms of practicing medicine represents a path that is epistemologically and ethically distinct from the one that has been adopted, which adds disciplines from the human and social sciences and from the integrative rationalities to fill the emptiness of subjectivity left by the biomedical model. While in this path the nucleus of the medical know-how continues to be the biomedical one, which we try to mend in many ways, in the other perspective, this nucleus is questioned by complex medical systems with their own tradition of legitimization of truths.

William Perry, psychologist of the University of Harvard, produced pioneering research, between the 1950s and 1960s, on the relationships between cognitive and ethical postures in the education of university students. His studies⁵² – and subsequent research revalidated his main findings⁵³ - showed that students who are able to integrate, into their way of understanding knowledge and science, different forms of seeing the world, recognizing their qualities and limitations, are also less dualistic and less reductionist from the moral point of view. The opposite situations were also associated: students who remained tied to only one epistemological approach tended to be more rigid and to have difficulties in their interpersonal relations with colleagues and teachers. Thus, the recognition and the inclusion of an alternative rationality in medical education, respecting its alterity, can foster a number of questionings to the medicine student: is science the only way of constructing knowledge and medical practices? What makes knowledge be scientific? What brings hegemony to a certain way of making science? Are there other ways of making science and of producing knowledge about becoming ill, providing care and healing? What are their limits and potentialities?

These notes propose that a fundamental contribution of an integrative practice or medical rationality does not depend only on the utility of its communicative, interpretive (diagnostic) and therapeutic tools, but also on its potential for showing that there are holistic and complex ways of practicing medicine that are currently marginalized. Their methods and contents can and must be analyzed critically, in terms of the results that are enabled, their limits and failures, the biases they

present, and they must be compared to other rationalities and to the values and principles that guide them. It is necessary to reflect on whether it is interesting or not for medicine to be guided by such principles and values that support a given ethical-epistemological matrix. The integration of alternative tools would not be guided only by the criteria of efficacy and capacity for solving problems (which vary according to the medical rationalities), but also by the openness to the multiplicity of possibilities of providing care for an ill human being and by the importance of maintaining this openness as a criterion that sustains medicine as a human activity, neither totalizing nor homogenizing⁵⁴.

These considerations, drawn from the first proposition extracted from Steiner's texts, open space for us to analyze the others. Each one of them is a possibility, so that students experiment with other ways of approaching essential issues of the educational process in medicine.

The second proposition indicates a pathway to understand the principles of the functioning of the organs and systems of the human body, in the states of health and illness, in an integrative perspective, through the interpretive keys of three-folding and four-folding. The third proposition offers an analogy and proposes an anthroposophic reading of the man-nature relationship as the basis for research and orientation of new treatments. The fourth and last proposition describes a path towards the psychic and moral maturation of the medicine student through meditative practices that are inseparable from his cognitive learning. Each of these propositions represents a possible pathway, within a complex and singular medical system, to answer questions whose openness to a multiplicity of answers is fundamental to the education of the future doctor: What is health? What characterizes a state of illness? How can I find a way to interrupt or at least mitigate that state of organic or psychic suffering? How do subjective-objective, mind-body, man-cosmos relate to one another in this process? How can I prepare myself to the psychic and moral challenges that this learning and the exercise of this profession will demand of me?

Thus, in this analysis, we decided, due to the Gadamerian hermeneutic framework, not to focus on delimiting specific advantages or disadvantages of the anthroposophic diagnostic-therapeutic techniques. Instead, our purpose is to show that, much probably because its birth is united to the birth of the affirmation of the signs that are characteristic of the biomedical model, its content has great potential - and it is the responsibility of an ethical and political decision, more than of a scientific decision, to take advantage of it or not - for questioning and serving as an alternative, in very direct dialog conditions, to the epistemological and ethical principles of biomedicine. Thus, anthroposophical medicine can contribute to a medical education that is less monological communicatively, less arrogant epistemologically, less monotonous culturally and more plural, dialogic, humble and mixed and, for these reasons, more human.

Final remarks

Within the hermeneutic proposal of this paper, we discussed important issues for a critical analysis of the possible contributions that the teaching of an alternative and complementary rationality like anthroposophical medicine can give to medical education. Our aim was not to point at particularities of anthroposophical medicine that can make it become an obligatory curricular content; rather, our purpose was to shed light on some possibilities that can be opened to medical education with this teaching. We are aware of the political and economic solidity of the hegemony of the biomedical model, and it does not seem adequate to defend that other medical rationalities, when added to it, occupy, in the future, the position of an integrative neo-hegemony. The strength of the alterity brought by know-how like that of anthroposophical medicine is related to searching for gaps for the survival of plurality and not to sowing universalizing proto-knowledge.

Integrality, as an educational horizon of medicine students, can also be understood as the co-existence among different ways of walking through life in health, and the teaching of non-biomedical rationalities, like anthroposophical medicine, is an extremely powerful path to open education to this sense.

Colaborators

The author Leandro David Wenceslau participated in all the stages of the preparation of the paper. The authors Ferdinand Röhr and Charles Dalcanale Tesser participated in the definition of the methodology, discussion of results, conclusions, and in the revision of the text.

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