

# The Impact of the Foundations of Taoism on the Development of Oriental Medical Practices

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### Abstract.

Currently, there are a large number of human pathologies, the etiology of which has not been clarified. As a result, their therapy is not pathogenetic, but symptomatic. Against this background, it becomes clear the desire of patients to understand what is happening to their body, so that their interests are often shifted towards the use of oriental medicine, the theoretical foundation of which are some provisions of the philosophy of Taoism. It is necessary to pay due attention to the study of the theoretical foundations of oriental medicine, as they determine the necessary direction of treatment. The aim of the work is to identify the impact of the foundations of Taoism on the development of medical practices of oriental (integrative) medicine. The performed analysis allowed us to draw the following conclusions: Taoist doctrine of human functioning was the basis for the development of methods of oriental medicine, currently used in various pathologies. The most actively used techniques are based on the doctrine of acupuncture points and Chi energy circulation.

INTRODUCTION

Currently, there are a large number of human pathologies, the etiology of which has not been clarified. As a result, their therapy is not pathogenetic, but symptomatic. Against this background, it becomes clear the desire of patients to understand what is happening to their body, so that their interests are often shifted towards the use of oriental medicine, the theoretical foundation of which are some provisions of the philosophy of Taoism. It is necessary to pay due attention to the study of the theoretical foundations of oriental medicine, as they determine the necessary direction of treatment.

On the territory of the former USSR, the introduction of oriental medical practices began in the 1960s. In the monographs by V.G. Vogralik (1), I.I. Fedorov (2) and G. Luvsan (3) the use of reflexology and massage techniques in medicine was considered. However, the subsequent tense political relations between the USSR and China caused some stagnation in the study of this problem. Russians again returned to the study of this topic in the early 1980s, when oriental medicine began to spread in the Soviet Union, which was manifested in the creation of specialized medical units in the health care system. Similar processes took place in the West: the penetration of methods of oriental medicine in clinics and medical institutions were detected. However, the theoretical basis of medical practices remained almost without attention and little interest of medical specialists. Issues related to their consideration will be also discussed in this article.

The aim of the work is to identify the impact of the foundations of Taoism on the development of medical practices of oriental (integrative) medicine.

### METHODS

The main method of this research is an analytical one that allows to analyze the contribution of Taoist teachings to the development of oriental medicine. The comparative method and classification are used as auxiliary methods.

### Ideas about the structure and functioning of the human body in the philosophy of Taoism

To date, the conditions and causes of many human diseases are not known. Therefore, the applied efforts are symptomatic, but not pathogenetic ones. As a result, patients tend to use oriental medicine, as it, according to some researchers, provides an opportunity to find out what is the origin of the pathology and how to eliminate the cause of the disease.

It is important here to consider the Taoist doctrine of the structure and functioning of the human body. The fundamental concept of Taoism is the concept of Tao. The founder of Taoism, Lao-Tzu, identified Tao as the root cause and the source of the Universe and at the same time as the world rule (4). He stated that

cognition of Tao is the goal of human life, upon reaching which he will be able not only to cure, but also to prevent diseases, because to understand Tao means to know the essence of life and the Universe.

According to Taoist teachings, the main vital force and source of the most life is energy substance Chi, that in narrow sense of words can be understand, as vital energy, circulating on body rights. Human health depends on the correct circulation of Chi along the meridians in the body. Since the cause of the disease is to slow down the flow of Chi or the emergence of obstacles to its flow, medical practices of Taoism are aimed at cleansing the channels and regulating the movement of Chi energy in the human body (1).

There are several types of Chi energy: nourishing, respiratory, protective and primary. Nutritional Chi occurs during the life of the body, the conversion of nutrients. Respiratory Chi is responsible for the injection of air and the work of blood vessels and the heart, provides homeostasis of the body and its movement. Protective Chi is on the surface of the body and provides its defenses. Primary Chi is inherited from parents and is therefore present in the body before its birth (1-3). All types of Chi are associated with Chi of the whole organism, for the full functioning of which it is necessary to have a balanced and unimpeded movement of Chi through the energy channels. When the movement of Chi is disturbed or its insufficiency occurs, the body can not function properly, which leads to various diseases that should be treated using a methodology that allows to compensate for the lack of Chi and balance its movement through the body.

An important provision of the Taoist doctrine on the structure of the human body is also the provision on the homomorphism of the macrocosm and microcosm (1). The human body is considered an analogue of the world, that is, the accumulation of spirits and the result of the interaction of Yin and Yang. As a result, to get rid of diseases and obtain immortality, it was necessary to create such conditions for these spirits that they did not leave the body. Hence, the reason for the idea of asceticism becomes clear.

Thus, the idea of the structure of the body and the laws of its life largely determined the currently used medical practice of oriental medicine. However, the above theoretical provisions require confirmation by modern science. Let us first consider the variety of medical practices.

## Classification of medical practices used for various pathologies in humans

Over the past 20 years, the medical situation has changed significantly in the incidence of such pathologies as

cancer, asthma, autism, diabetes, depression. Against this background, increased interest in complementary and alternative medicine, part of which is oriental medicine. The classification of alternative medical practices is rather conditional — the following forms (8) can be distinguished.

First, it is biologically based systems-include the use of natural substances - herbs, vitamins, minerals, enzymes, food additives, which are not regulated by the national committees on pharmaceutical activity.

Secondly, the practice of "mind-body" - approaches based on the use of the influence of the mind on the functions of the body. These include: (a) approaches using art therapy, music therapy, aromatherapy - creating an atmosphere of relaxation, peace and comfort; (b) an approach based on biological feedback the use of mechanical or electrical devices to identify physiological information in response to psychological signal (8); (c) hypnosis - changing consciousness by concentrating on an object or idea with a specific purpose; (4) prayer - a form of communication with God; (d) progressive muscle relaxation — a technique of soft stretching and subsequent relaxation of muscle groups; (e) yoga — a combination of exercise with special breathing and meditation.

Third, manipulation approaches — chiropractic, massage and osteopathy-include the regulation of vital functions mainly through the impact on the musculoskeletal system. This also includes reflexology - a doctrine based on the theory that the special zones on the arms and legs and other surfaces of the body are associated with the internal functions of the body.

Fourth, holistic medical approaches: (a) Ayurveda — Indian practice — speaks of the importance of the connection between mind, body and spirit. Treatment includes nutrition correction, herbal medicine, exercise, yoga; (b) homeopathy practice is based on the statement "like is treated like". According to homeopaths, high concentrations of certain substances can cause certain negative effects, while their low concentrations eliminate these symptoms; (c) traditional Chinese medicine based on the concept of life energy Chi, consisting of negative (Yin) and positive (Yang) energies. The disease develops in violation of the circulation of Chi energy. Effects on humans are in the correction of nutrition, herbal medicine, exercise, massage. This also includes the use of acupuncture, based on the impact of stimulation points through which the qi energy flows through the energy meridians.

Thus, there are different classifications of alternative medical practices (14). They differ in theoretical foundations. In our work, the emphasis is placed on oriental Chinese medicine, the development of which was significantly influenced by the principles of Taoism.

## The use of oriental medicine for various pathologies: Practice and theory

To conduct a comparative analysis, we will focus on some pathologies and try to determine the effectiveness of Western and oriental therapeutic approaches. As a criterion for the effectiveness of treatment, we take 5-year survival. According to the literature, 5-year survival rate is as follows: lung cancer ---about 10%, stomach cancer — about 20%, bowel cancer — up to 30%, prostate cancer — about 5%, breast cancer — about 35%, liver cancer — about 10%, ovarian cancer — about 5%. Survival depends on the stage of the disease at which it is detected. Unfortunately, in the modern literature there is no data to draw conclusions about the impact of oriental medicine methods on such an indicator as 5-year survival. However, there are numerous reports of the positive impact of various oriental practices. For example, on December 1, 2017, Chinese oncologists from the Oncology Department of the University of Fudan reported on the influence of acupuncture methods in chronic fatigue syndrome in lung cancer. The study was randomized, double-blind, placebocontrolled. During the month, twice a week, patients were stimulated by acupuncture points LI-4, Ren-6, St-36, KI-3 and Sp-6. After 2 weeks, half of the patients showed a significant decrease in weakness. Similar data were obtained in the study of the effect of acupuncture on chronic fatigue syndrome in breast cancer (12).

The positive effect of auriculotherapy in the treatment of constipation in patients with leukemia undergoing chemotherapy (13) is reported. Sometimes along with traditional acupuncture laser is used. In the work of Croatian doctors reported a positive effect on the course of neuropathic pain in a patient using cytostatic (6). Positive results of acupuncture were observed in the treatment of type 2 diabetes in a patient with myasthenia gravis (10). More recently, German physicians have presented protocols for the use of acupuncture in a wide variety of diseases.

It is especially important to consider from the point of view of modern science (in particular - biophysics) the theoretical basis of the applied practices. Thus, in the second half of the twentieth century, German physicists (14), together with their Indian colleagues, develop the hypothesis that ultra-weak light from biological objects, called bioemission, is an indicator of the existence of its own electromagnetic field inside a living object. According to the theory of biophotonics, biological objects throughout life produce photons of very low intensity in different ranges. This radiation has received the name of biophotonic. Radiation depends on environmental factors and the physiological state of a living organism. Speaking about the etiology of the the authors believe that such processes as signal, chemiluminescence, bioluminescence, fluorescence and superfluorescence can not be their source. Their origin and source are being actively investigated. The type of radiation of biological photons is represented by such forms as spontaneous and lightinduced. In spontaneous form, the nature of photon emission is practically not modified over time. Spontaneous emission is ultraweak and its detection requires sensitive photomultipliers. Upon induction of light-biological photon radiation is more intensive, but relatively short-term (15). The intensity of the signal drops to the level of spontaneous emission in the course of minutes. Visually, it has the appearance of a nonexponential decay of the relaxation. The nature of the recession curve depends on the type of object. The maximum intensity is about 2-3 orders of magnitude higher than with spontaneous radiation (16).

Regarding the source of biological photons, it has been suggested that the deoxyribonucleic acid (DNA) molecule can play a key role. In the model proposed by F.A. Popp, biological photons are re-radiated by the DNA molecule. It was determined that the emitted light is coherent. The authors believe that coherent photons can be stored in DNA molecules and this causes an electromagnetic field inside the cell. DNA, thus, according to the staff of the International Institute of Biophysics is an electronically excited high-energy complex that regulates the transfer of genetic information in the cell. DNA radiation reflects information about the physiological state of a living cell. With the development of various pathologies, the nature of the radiation of biological photons changes, which can serve as a diagnostic criterion for certain diseases (16, 17). Later works by F.A. Popp with colleagues showed the existence of meridians in the body of man (17-19). The presented data allow us to correlate the Chi energy with the emission of biological photons recorded by technical means of many biophysical laboratories. This type of intra- and intercellular radiation may be used for cell-to-cell communication (20-22).

Thus, it is difficult to talk about the effectiveness of oriental therapeutic approaches in comparison with Western practices. However, we can observe the positive impact of oriental practices. In addition, today some theoretical, and hence their practical, provisions of oriental medicine receive scientific justification.

#### CONCLUSION

The increased interest in alternative methods of treatment of serious ailments by methods of oriental medicine is confirmed not only by the increasing number of scientific articles, but also by the growing number of specialized journals. It is worth noting that at present the ancient theoretical ideas about the functioning of the human body are partially confirmed by the development of modern technologies. However, it is difficult to compare the effectiveness of the Eastern and Western approaches due to the lack of special studies on this issue. In addition, it is important to emphasize that the majority of Western medical institutions fundamentally refuse to use Eastern methods because of their little knowledge. In contrast, clinics in China, South Korea, Vietnam, Malaysia and other Southeast Asian countries successfully combine the achievements of Western and Chinese medicine. Government regulation of the treatment process (health legislation) has an important impact on these trends. As for the philosophy of Taoism, the most popular was the doctrine of the circulation of Chi energy, which laid the foundation for the most commonly used nowadays acupuncture techniques.

The analysis allowed us to draw the following conclusions. Taoist doctrine of human functioning was the basis for the development of methods of oriental medicine, currently used in various pathologies. The most actively used techniques are based on the doctrine of acupuncture points and Chi energy circulation.

#### References

- Vasil'ev V.P. History of religions of the East. M: High School, 1983. - 266 p.
- Vogralik V.G. Word about Chinese medicine. Bitter, Bitterly. KN. publishing house, 1959. - 176 p.
- Luvsan G. Traditional and modern aspects of Eastern reflexology. -M: Science, 1990. - 587 p.
- 4. Fedorov, I.I. Essays on Chinese folk medicine. M: Medgiz, 1960. 84 p.
- Barsacchi R. Correlation between hydroperoxide-induced chemiluminescence of the heart and its function / R. Barsacchi, P. Camici, U. Bottigli, P.A. Salvadori, G. Pelosi, M. Maiorino, F. Ursini // Biochim Biophys Acta. – 1983. – 762(2). – P. 241-247.
- Butkovic D. Laser acupuncture treatment of neuropathic pain in a boy with brain tumour / D. Butkovic, O.K. Tot // Compl. Ther. Med. - 2017. – Vol. 35. – P. 53-56.
- Cheng C.-S. Acupuncture for cancer-related fatigue in lung cancer patients: a randomized, double blind, placebo-controlled pilot trial /

C.-S. Cheng, L.-Y. Chen, Z.-Y. Ning, C.-Y. Zhang, H. Chen, Z. Chen, X.-Y. Zhu, J. Xie // Support Care Cancer. – 2017. – Vol. 25(12). – P. 3807-3814.

- Culbert T. Integrative pediatrics / T. Culbert, K. Olness // New York: Oxford University Press, 2010. – 98 p.
- Devaraj B. Ultraweak light emission from rat liver nuclei / R.Q. Scott, P. Roschger, H. Inaba // Photochem Photobiol. – 1991. – 54(2). – P. 289-293.
- Kim Y.J. Acupuncture for management of type 2 diabetes mellitus in a patient with myasthenia gravis: a case report // J. Acupunct. Meridian Stud. – 2017. – Vol. 10 (4). – P. 290-293.
- Kramer S. Acupuncture for symptom relief in palliative care-study protocol and semistandardized treatment schemes / S. Kramer, D. Irnich, S. Lorenzl // J. Acupunct Meridian Stud. – 2017. – Vol. 10(4). – P. 294-302.
- Ling W.M. Effects of acupuncture and acupressure on cancerrelated fatigue: a systematic review / L.Y. Lui, W.K. So, K. Chan // Oncol Nurs Forum. – 2014. – Nov 1; 41(6). – P. 581-592.
- Liu X.-R. Effects of auricular acupressure therapy for preventing constipation in leukemia patients undergoing chemotherapy: Protocol for a systematic review / X.-R. Liu, L. Feng, R. Nicole, N.-S. Wong // Eur. J. Integrat. Med. – 2017. – Vol.15. – P. 42-46.
- Misra S.M. A Guide to integrative pediatrics for the healthcare professional / S.M. Misra, A.M. Verissimo // Switzerland: Springer International Publishing, 2014. – 95 p.
- Niggli H.J. Artificial sunlight irradiation induces ultraweak photon emission in human skin fibroblasts // J Photochem Photobiol B. – 1993. – 18(2-3). – P. 281-285.
- Popp F.A. Evidence of non-classical (squeezed) light in biological systems / F.A. Popp, J.J. Chang, A. Herzog, Z. Yan, Y. Yan // Physics Lett. A. – 2002. – Vol. 293. – P. 98-102.
- Popp F. Evidence of light piping (meridian-like channels) in the human body and nonlocal EMF effects / F. Popp, M. Walburg, K. Schlebusch, W. Klimek // Electromag. Biol. Med. – 2005. – Vol. 24. – P. 359-374.
- Schlebusch K.P. Biophotonics in the infrared spectral range reveal acupuncture meridian structure of the body / K.P. Schlebusch, W. Maric-Oehler, F.A. Popp // J. Alternat. Complement. Med. – 2005. – Vol. 11(1). – P. 171–173.
- Sławiński J. Luminescence research and its relation to ultraweak cell radiation // Experientia. – 1988. – 44(7). – P. 559-571.
- Trushin M.V. Light-mediated "conversation" among microorganisms // Microbiological Research. 2004.-159(1).- P. 1-10.
- Trushin M.V. Culture-to-culture physical interactions causes the alteration in red and infrared light stimulation of Escherichia coli growth rate // Journal of Microbiology, Immunology and Infection.-2003.-36(2).-P. 149-152
- Trushin M.V. Distant non-chemical communication in various biological systems // Rivista di Biologia - Biology Forum.-2004.-97(3).- P. 409-442.