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## HISTORY DOCTRINE OF PSYCHOSOMATIC DISORDERS AND PSYCHOSOMATIC DISEASES

The article is devoted to the historical aspects of the study of the influence of psychological factors on the occurrence and the further dynamics of psychosomatic disorders and psychosomatic diseases. The views of scientists from different eras – from Ancient Greece to the 80-s today are lights. The features of the methodological approaches in Europe and the United States of America and the Russian Empire / Soviet Union are characterized. The basic personality types that contribute to certain psychosomatic disorders are submitted.

**Key words:** history; methodological approaches; psychosomatic disorders; psychosomatic diseases.

“There are no diseases that are purely mental or purely somatic, but a living process in a living organism; and its vital activity combines mental and somatic aspects of a disease”  
**R. A. Luria**

**T**he emotional component of human mental life has an extremely intense influence over bodily processes. Irritation, anger, fear, sadness, and grief are not just experienced in a special way; they also cause changes in the functioning of the muscular system, heart rate and blood circulation, respiration, gastrointestinal tract, etc. Since these phenomena accompany human beings hourly and daily, they see them as part of themselves. Long-lasting and intense negative emotions may not just “distort” personality, but may also cause psychosomatic disorders and psychosomatic diseases.

According to modern scientific beliefs, no psychosomatic disorder or disease occurs solely due to either mental or physiological peculiarities of an individual: it is impossible to establish its etiology and predict dynamics by appealing to the properties of mental or somatic components separately. Only their

interaction together with psychogenic external features, including professional environment, can cause the human condition, which is defined as psychosomatic disorder.

Psychosomatics (from Greek: *psyche* – soul, *soma* – body) is a trend in modern medical psychology and clinical medicine, the object of which is to study the influence of psychological factors over the occurrence and subsequent dynamics of psychosomatic disorders or diseases. Psychosomatic interaction is definitely one of the most controversial issues of modern psychological science.

In the course of its development psychosomatics being an integrative psycho-medical field of human science and practice has gone through several stages, each of which was predominated by one or another theoretical concept. The formation of the modern concept of psychosomatic disorders evolved from a unilinear construct to multifactorial model of psychosomatic disease, which gives consideration to the interaction of psychological, physiological and social factors. However, in Western countries there is a tendency to rejection of the term “psychosomatic” and its replacement with another one that would more accurately reflect the interaction between *psyche* and *soma*. Such attempts do not seem to be successful enough (e. g., “psychoneuroimmunology” as an explanation for psychosomatic disorders through the mechanisms of neuroimmune regulation).

Generally, the statement of fact and the study of correlation between mental and physical has a long history. As far back as in the times of ancient India doctors were convinced that negative emotions are the prerequisite of most diseases. Ancient Greek scholars regarded human beings as single unity and in the treatment of patients paid great attention to their nature and temper. Thus, Hippocrates believed the health problems were caused by imbalance of various “juices” in the human body and emphasized the need to study the psychology of patients: “It's more important to know what sort of *person* has a disease than to know what sort of *disease* a person has”. Aristotle claimed that soul can not be separated from body. The saying of Socrates has come down to us from ancient times: “It is wrong to treat the eyes without paying attention to the head, to treat the head without paying attention to the body, to treat the body without paying

attention to the soul". Cicero came up with the idea that physical health is influenced by emotional expressions [1].

In the course of development of psychology as a science, at first scholars lexicographers, and later psychologists began to study certain properties of human psyche, in particular, emotions. One of the first studies on this topic was the treatise by B. Spinoza (XVII c.) "On the origin and nature of the emotions", which said: "I call the emotion of pleasure that belongs both with the soul and the body, pleasure or fun, and the same emotion of discontent - pain or melancholy".

Targeted study of the influence of psyche over the bodily changes began within general and experimental psychology in the late XIX – early XX century. (W. Wundt, N. Grot, U. James, E. Claparede, F. Kruger et al.). Although the term "psychosomatics" was first used in 1818 by a German psychiatrist I. K. Heiroth. In his studies "Handbook of mental disorders", "Handbook of anthropology", "The key to heaven and hell in human being or About moral virtue and passivity" he claimed that all the problems in the internal organs are the consequence of human "vices": "If the abdominal organs could tell the story of their suffering, we would be surprised to find out how destructive the soul can be for the body it owns". These are his words: "The causes of insomnia are usually mentally-somatic, though each of these vital areas may separately cause it". I. K. Heiroth defined the principles that a century later became the basis of psychosomatics. In 1822 a German psychiatrist M. Jacobi proposed the concept of "somatopsyche" in contrast and at the same time in addition to "psychosomatics", understanding it as the impact of physical defects on the course of mental life. In 1927 an Austrian psychoanalyst F. Deutsch formulated the general concept of psychosomatics [2].

Back in the 30s of the XIX century K. Ideler identified the differences in the psychological nature of fear and anxiety, but researchers addressed this problem only in the mid-twentieth century. Briefly his idea can be described as follows. If a human being is unable to overcome his or her fear of anything or anyone, he or she can run away, hide or ask for help for the reasons of fear exist objectively, that is beyond the human being. While the causes of anxiety are rooted in the human being. Therefore, humans often do not know what causes this anxiety, so they need to find the "enemy" not to deal with the causes of fear, but to have a "nervous discharge".

If there is no enemy, the human being begins the “fight” on the field, where victory is secured – they start to massacre their own body. Suppressed aggression leads to self-destruction of the body and the occurrence of psychosomatic diseases [3].

Exploring the physiological effects of anger and fear, W. Cannon proved that the body responds to emergencies by specific adaptive physiological changes in the overall structure. Accordingly, emotional state activates physiological functions designed to prepare the body for the situation “signaled” by the emotions. Fear and anger stimulate the adrenal cortex causing adrenaline to activate carbohydrate metabolism in a way that sugar level increases intensely to supply elevated vigor. Blood pressure and blood circulation change so that the blood could be supplied to the organs responsible for the “fight” in greater volume. Simultaneously anabolic and reserve functions (digestion, excretion) get inhibited: an organism that needs to exert all its strength to overcome an emergency situation can not afford a “luxury” of digesting or absorbing food [3]. The studies on the mechanisms of emotional impact on the functions of vital internal organs by W. Cannon allowed, in particular, to explain the impact of emotional stress on the occurrence of chronic organic diseases.

The development of psychosomatics is often associated with the studies of Z. Freud, namely those describing the case history of Anna O., when the emergence of physical symptoms due to the mechanism of conversion was justified for the first time. Freud himself never used the term “psychosomatics”, but the idea of conversion of emotional conflict onto the physical functions of the body, manifested by him and I. Breuer in the monograph “The study of hysteria”, became one of its cornerstones. Symbolic interpretation of emotions was based upon unconscious motives, which allowed to partially explain certain functional disorders in various organs and systems based on “strangled affect” or “affect traces”. They proved that ousted emotions and psychological trauma conversion may occur through somatic symptoms. Freud emphasized that this is only possible in case of “somatic compliance” – a physiological factor that is important for the choice of organ [4, p. 477–479].

His followers, including psychoanalysts R. Stegmann and P. Federn provided vivid descriptions of somatic diseases caused by intense emotional experiences. G. Groddeck tried to prove that

emotional factors are important not only as part of symptoms of conversion hysteria, but also as part of chronic organic diseases. He believed that all the symptoms of internal organs' traumas are a highly specific consequence of suppressed thoughts and fantasies. A similar point of view was expressed by F. Deutsch, who used the concept of conversion suggested by Freud to explain all the dysfunctions of the human body [5].

Meanwhile, the autonomic nervous system that carries out their innervation is not intended and is not able to perceive mental states, unlike some parts of the human body (vocal chords and facial muscles), which are controlled by consciousness and express and reflect the mental state of an individual. Therefore, internal organs do not respond to individual experiences, only to the overall emotional state. Similarly, they can not, unlike conversion symptoms, relieve emotional stress (e. g., high blood pressure during the state of anger does not suppress anger, but rather supports it).

Thus, in the early twentieth century, based on psychoanalysis as a modern alternative trend psychosomatics separated as an independent stream. Historically, in the 30s of the twentieth century the majority of its adheres emigrated to the U.S. in view of the situation in Europe, where they created the American Psychosomatic Society with press organ "Psychosomatic Medicine" magazine.

Along with the development of neurophysiological and psychoanalytic researches in Western Europe in the early twentieth century, psychosomatics started developing in the Russian Empire. Famous Russian doctors (N. I. Pirogov, A. A. Ostroumov, S. P. Botkin et al.) repeatedly stressed the enormous role of psychological factors in the course of a disease. But in Russia, unlike Western psychoanalytically oriented theories, the theory of psychosomatics based primarily on the study of material substrate of the psyche – brain, which was initiated by M. E. Vvedensky, A. A. Ukhtomskiy, I. P. Pavlov and his school. Although the first Russian doctor of psychosomatics is considered U. V. Kannabikh, who proved that different somatic diseases may be a manifestation of similar pathopsychological processes [4].

The First World War brought misery and suffering to millions of people. The consequences of war and psychological traumas disabled a large number of citizens of countries that took part in this war. This social background became the basis for intensified interest

to social and emotional factors of somatic diseases. One of the most prominent researchers and clinicians of that time in Germany was L. Alkan. He explained that chronic emotional stress can cause a variety of physical changes that occur as organic diseases. For example, emotions can induce prolonged contractions and spasms of organs, changing blood supply and causing partial or even complete atrophy. Spasms can lead to increased esophageal and left ventricular hypertrophy with the onset of essential hypertension. Emotional stimulation of endocrine glands can cause dystrophy of tissue as at thyrotoxicosis, induced by psychological factors. L. Alkan even suggested that emotions play a causal role in the occurrence of diabetes, although he could not clinically prove this.

At the same time K. Farencah clearly demonstrated the influence of emotions over blood pressure instability and substantiated psychogenic origin of essential hypertension; E. Dupre defined psychosomatic disorders as psychogenic dysfunctions of certain organs and systems; G. R. Heyer and F. Moore published fundamental studies on the opportunities of psychotherapy in the treatment of organic diseases.

Describing the clinical and psychological trend it is necessary to separately mention the contribution of V. Weizsacker. He believed that emotions affect the disorders of body functions, but unlike psychoanalysts persisted in the opinion of various processes and dynamics of somatic neuroses. The development of any disease follows a certain pattern: a disease does not occur at any time, only during moral, mental or emotional crisis.

V. Weizsacker denied the existence of one-dimensional connection between diseases and mental processes. He did not accept the idea that sore throat, ulcers, tuberculosis, nephritis, hepatitis or leukemia occur as a direct result of certain psychological reasons. Indeed, causal links are fateful and can not be avoided, but in the science about human beings the laws and principles of classical mechanics are not totally applicable. They are too simplistic for this because physical is inherent to mental.

Indeed, sometimes the body expresses its inner processes through the language of emotions: fear, despair, sadness, joy. Sometimes mental processes manifest themselves using the "language of organs": a person blushes, trembles, legs go weak at the knees, eyes go blind, pain in the back or rash on the face occur. But

there is no direct causal link between what happened at first and what followed next. Both are different manifestations of internal state [5].

Creatively developing the ideas of Z. Freud, F. Alexander proposed a theory of intrapsychological conflict that affects internal organs. Studying typical mental phenomena, which could indicate different psychosomatic diseases, he identified and described conflict models specific to certain diseases that occur in different types of personalities. He believes that emotional stress can not be suppressed until autonomic changes related to such conflict remain unchanged. Tissue dystrophy and irreversible organic diseases may follow.

F. Alexander associated specific psychosomatic diseases with the type of emotional conflict and distinguished between hysterical conversion reactions and adaptive changes in autonomic functions caused by emotional stress. In his view, the transfer of the theory of conversion hysteria to all psychosomatic reactions is a typical example of mistakes characteristic of the history of science: uncritical use of concepts that work in one area to the area where they are no longer valid [6].

It should be noted that in Western Europe psychosomatic disorders and diseases have been primarily studied by German scientists. In 1928 "Neurologist" magazine was founded; it included a separate section on psychosomatics. In one of his articles G. Bergmann described the stage of "functional disorder motives" and proved that it precedes organic changes in peptic ulcer, colitis and hypertension. Thus, a functional disorder becomes the beginning of a pathogenic chain. In 1950 the first psychosomatic clinic headed by A. Mitscherlich was created. In 1956 "Journal on Psychosomatic Medicine and Psychoanalysis" started coming out [5].

At the same time, psychosomatic problems were developed in the Soviet Union. In the 30s of the twentieth century D. D. Pletnev, who studied cardiovascular diseases, insisted on reviewing the concepts of clinical medicine established at the time. He asserted the need to introduce the basic tenet of medicine, which should: "Bring the concept of functional unity of the body to the fore" [150]. In the early 40s a number of papers on psychosomatic medicine was published [4, p. 479].

The Second World War gave new impetus to the development of psychosomatics; the tragic events of the war allowed scientists, mostly military surgeons, to identify and empirically verify many

new facts concerning mental and physical interconnection. In particular, this applied to the description of boundary displays between somatic medicine and psychiatry based upon the dynamics of combatants' personalities [8; 9].

While in European and Soviet scientific schools the development of psychosomatics was mainly initiated by clinicians, in the United States, taking into account the popularity of psychoanalysis, such researches were based on the study of the "problem personalities". In the 50s of the twentieth century the number of researches in the field of psychosomatics and related scientific directions increased; human being and interconnection of psychological and social factors, on the one hand, and physiological functions on the other become the object of close attention of such studies. In particular, according to G. Ammon, destructive processes in psychosomatic diseases corresponds to the emergence of narcissistic structural deficit, in which the patient acts as the carrier of group symptoms. According to Karl Jaspers, psychosomatic disorders were treated primarily as unconscious desire to "escape into disease from the unbearable reality" [10, p. 14].

S. L. Halliday considered that only the diseases caused by the influence of psychological factors on physical condition should be regarded as psychosomatic diseases. In his opinion, the following formula applies to psychosomatic diseases: (peculiarities of etiology and development): + (personality type): + (sex peculiarities): + (interaction with other diseases): + (family features): + (course phasing).

F. Dunbar described 11 types of personality (ulcer, cardiac, arthritis, etc.) that contribute to the occurrence of the relevant physical disease, and put forward the theory of "specific personality types", according to which the psychosomatic diseases depends on a particular personality profile [11, p. 298–300].

B. T. Engel suggested dividing the variety of psychosomatic conditions into psychogenic, physiological and somatopsychic or psychosomatic. In psychogenic disorders (hysteria, hypochondria, bulimia) there are no major organ dysfunctions, while physiological symptoms are only physiological correlates of emotions. Most of psychosomatic disorders, according to him, belong to somatopsychic or psychosomatic, a characteristic feature of which is the presence of biological predetermination that not only determines the biological vulnerability of organs or systems, but also affects psychological



development of a child. The above constitutional factors connect somatic and emotional components of personality, manifesting itself as causal relationship.

Explaining the mechanism of psychosomatic disorders, H. Freyberger emphasized the determining role of psychotrauma (the idea of “loss of objects valued by an individual”), and R. Sifneos – by the lack of ability to verbalize emotions, called “alexithymia”. Accordingly, one may state that emotional reactions occur in two dimensions: psychological (sensual tons of pleasure or displeasure) and vegetative, which performs an important biological function of energy supply for the coherent behavior [12].

Thus, the study of psychosomatic disorders and psychosomatic diseases has a long history and the theory and methodology of their research is rather contradictory. At that the influence of stressful environmental conditions on the pathogenesis of psychosomatic conditions is undeniable, as well as interconnection between pathocharacterological and behavioral characteristics of an individual with sensitivity or resistance to certain somatic diseases, and dependence of reaction to a disease of the type of personality profile. It is also clear that further progress in the study of psychosomatic disorders is impossible without integrating the three main aspects of the problem: nosologic, syndrome-based and personal. While the location of psychosomatic disorders in their mono-system character is relatively easy to establish on the basis of complaints, poly-systemic nature of psychosomatic disorder makes it difficult to determine the leading somatic pathology and personal dysfunction in the selection of driving somatic pathology.

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