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Psychosomatics

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The monograph outlines theoretical, methodological and practical foundations of the psychosomatic approach to the diagnosis, psychosomatic diseases correction and prevention, which is carried out on the chronopsychological prediction of these disorders course.

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PREFACE

Recently, the need for an integrated approach to prognosing the transgression of psychosomatic disorders in people with special needs has become especially urgent. These researches are of great social importance, since they allow us to solve an important task of modern society, connected with the strengthening of the health of the nation, first of all, its workable part, which is the key to a responsible solution to many socio-economic and political problems of Ukrainian society.

Modern cultural, economic and social transformations require extraordinary mobilization of cognitive, emotional and personal resources, constant readiness to solve life problems. Chronic strain and internal psychological reactivity - the everyday condition of a modern person, which is the cause of a significant increase in a number of psychosomatic disorders, which etiology is closely related to the peculiarities of the psychological sphere of a human individual with special needs. According to modern psychosocial data disorders in industrial countries are widespread among 40-50% of the population with special needs and this indicator is quite stable [400].

Psychosomatic disorder is the property of the human body as a system, it can not be explained by studying the properties of a single subsystem - psychic or somatic. Only the interaction between these subsystems and the environment can lead to a new state of the organism, which is defined as a psychosomatic illness. And only an understanding of these connections can give an opportunity to effectively influence its occurrence in people with special needs.

Changes that occur in the human body, both mental and somatic, are closely related to the time aspect. According to the data of scientific literature (P.Fress [395], N. Chuprikov [426], L.Mitin [426], D.Elkin [435]), the

type of subjective time perception or time orientation is one of the objective indicators of the dynamic properties of the psyche, reflecting the consistent process of changes that occur with a person throughout his life.

The life of an individual from birth to death has a cyclic structure (L. Vygotsky [96], P.Fress [395]). Modern scientists isolated many-day, and perennial months of cycles in the life of a human individual (E. Bunning [78], S. Shnol [430], A.Emme [441], A.Infri [389], L. Kuprianovich [188], B. Tsukanov [415]), distinguishing turning points (so-called nodal points) as a certain age in which there is a state of "psychological evil" demonstrated (Y. Molchanov [235], V. Rousalov [288], S. Bondarevich [61]). Discrete counting of individual time by people leads to the fact that at the level of subjective experiences and behavioral manifestations of their lives are uneven. During life clearly distinguished periods in the middle of which a person is in an optimal psychosomatic form, and in the beginning and at the end - at a minimum of their capabilities. On the scale of the periods of the great biological cycle (B. Tsukanov [416]) there is an age-related development of the psyche, fluctuations in the success of the activity, exacerbation of chronic non-infectious diseases, as well as psychosomatic crisis of personality (B. Tsukanov [415], O. Malhazov [218], V.Plochikh [263], O.Polunin [264], Z.Kireeva [160], S. Bondarevich [61]).

The analysis of scientific literature on the problem of research has shown that the scientific and psychological study of the relationship and interdependence of somatic disorders and temporal parameters of the human life cycle (on the example of the analysis of the dynamics of psychosomatic diseases of the human individual, taking into account the individual-typological features of the psyche) still remains beyond the attention of researchers.

The psychosomatic illnesses manifestation issues in each separate nosological form of the disease in the chronotype typological group and psychoprophylaxis of these disorders remain open in the outlined problem

field. Medical practice shows that when using the developed schemes of dispensary supervision, even a timely prevention of psychosomatic illness twice a year (spring-autumn) does not prevent the exacerbation of the disease in patients, as well as those who have special needs.

Aggravation of the disorder arises in them at different times of the year, despite preventive measures taken. This means that modern medicine can not timely predict the exacerbation of psychosomatic disorder. According to the author, the reason for this phenomenon is the absence of an individual psychosomatic approach in the treatment and prevention of the disease, which requires a comprehensive consideration of the psychological characteristics of each individual, which is not accidentally laid in the basis of the solution of an important modern medicine problem - the prediction of the psychosomatic disorders occurrence.

Taking into account the above, the development of an algorithm for chronopsychological prediction of the psychosomatic disorders occurring, and accordingly, psychoprophylaxis of these disorders in people with special needs, especially among students and the youth, can be considered relevant.

1. Psychosomatic relationships in pathology

Psychosomatic are considered disorders of the organ functions and systems, the origin and course of which belongs to the impact of psycho-traumatic factors (stress, various conflicts, crisis states and etc.) [4, p.123].

Most contemporary researchers distinguish psychosomatic reactions and psychosomatic illnesses [9; 12; 16; 32; 44]. The first is not yet precisely defined pathology and occurs in healthy people as isolated reactions of the organism to certain stressors. An example of these reactions is the beginnings of thinning of urination and diarrhea in students before heavy examinations. At the same time, under certain conditions, these single psychosomatic reactions can be the beginning of a psychosomatic illness.

Psychosomatic diseases (from the Greek ψυχή - soul and Greek - σωμα - body) are a group of painful states that appear as a result of the interaction of mental and physiological factors [44, p.213]. Psychosomatic disorder is a mental disorder that manifests itself at the physiological level; physiological disorders manifested at the mental level; or physiological pathologies that develop under the influence of psychogenic factors.

Recently provided "classical psychosomatoses" the clinical picture of which is organic lesion of a system (ulcer and hypertension, ulcerative colitis, etc). Psychosomatosis, being in essence psychogenic disorders, together with the roses and psychopaths, constitute the largest proportion of the disease [62].

Common for all psychosomatoses is acute or gradual onset, often with neurotic depression. Clinical disease presented a variety of somatic complaints and symptoms, which are distinct affective disorder. Mental disorders with psychosomatosis in the acute period are more often attributed to anxiety, panic reactions, and depression. Chronic course of the disease

leads to the appearance of distinct neurosis and, more often, psychopathic disorders [16].

To psychosomatic disorders are inclined, although to varying degrees, all age groups of the population, including children and adolescence. In children, psychosomatic pathology is expressed mainly by individual symptoms in the form of various psychosomatic reactions. These reactions sometimes do not differ from the neurotic, usually short-termed, which disappear in the elimination of the traumatic situation for the child. The most common treatment for psychosomatic disorders is characterized by knowledge of the importance of psychological factors, and by strengthening or addressing the claim easing somatic (physical) pain. Thus, the criterion for assigning an existing physical disease to a psychosomatic is the presence of psychologically significant stimuli from the environment, which in time is associated with the occurrence or the physical disorder exacerbation. Such an understanding of psychosomatic disorders is considered broad, since they include all functional disorders of internal organs and systems, the emergence and development of which is closely related to the nervous and psychological factors, the experience of acute or chronic psychological trauma or with the specific features of personally-emotional reagination of man to the environment [83].

Over time, four approaches to the study of psychosomatic relationships have been formed:

- etiological approach (the trait approach) postulates the position that people with certain personal characteristics have specific illnesses, i.e. the cause of their occurrence is the subject itself;
- second approach (stress moderators) is associated with the study of personal characteristics that increase or decrease the impact of stress. Its content consists of what personal characteristics only influencing the external causes of disease which are common in all people;

- The third approach is aimed at studying the attitude of the person to the disease in connection with her personality traits. It is believed that the latter affect the perception of a person's own health and the probability of seeking medical care;
- The fourth approach is to examine how the same therapeutic agents affect people with different typologies. For example, in studies by Y.Ilyin and colleagues, it has been proved that the response to hypertonic use of the single dose of the drug that they used depends on the strength-weakness of the nervous system. In those patients who differed in strength, there is deterioration of the functional state, and in patients with a weak nervous system - an improvement. In assessing the effectiveness of treatment for people with weak nervous system, the positive effect was obtained in 72% of cases, and in patients with strong nervous system - only in 21% of cases. No treatment effect occurred in 20 patients (53% respectively) [141, p.78].

These approaches require a detailed analysis of the problem of timely prediction of the course of psychosomatic illness and the effectiveness of treatment of these disorders.

The psychosomatic approach begins when the patient ceases to be only the carrier of the diseased organ and is considered holistic. Hence the psychosomatic direction can be considered as an opportunity for "treatment" from the departments of personalized medicine.

The pathogenesis of psychosomatic disorders is extremely complex and is determined by:

- non-specific hereditary and congenital burdensome somatic disorders and defects [83];
- with a fall inclination to psychosomatic disorders [100];
- neodynamic shifts (disorders of the central nervous system) [68];
- special needs [104];

- physical and physical condition during the action of traumatic events [107];
- due to unfavorable family and other social factors [115];
- the cases of psycho-traumatic events [116].

These factors not only participate in the origin of psychosomatic disorders, but also make the individual vulnerable to psycho-emotional stress, complicate psychological and biological protection, facilitate the emergence and aggravation of the course of somatic disorders.

Emotional response, expressed in the form of anxiety and constant anxiety, neuro-vegetative-endocrine changes, and a characteristic feeling of fear, is a link between the psychological and somatic spheres. A fear of feeling completely corresponds to protective physiological mechanisms. Usually it only reduces, but does not completely eliminate these physiological phenomena and their pathogenic effect. This process can be considered as inhibition, that is, a state where psychomotor and verbal expressions of anxiety or hostile feelings are blocked in such a way that stimuli coming from the central nervous system are disrupted by the somatic structures through the autonomic nervous system and thus lead to pathological changes in different systems of organs [85].

In the presence of an emotional experience, which is not blocked by the psyche and personal protection, but somatizes, psyche affects the system of respective organs. The functional stage of the disorder grows into destructive-morphological changes in the somatic system, and generalization of the psychosomatic illness occurs. Thus, the psychic factor acts as prominent.

The theoretical analysis of the pathogenesis of psychosomatic disorders makes it possible to conclude that the psychosomatic illnesses are those health problems, etiopathogenesis of which leads to emotions

somatization, that is, somatization without psychological protection, when the protection of mental equilibrium damages bodily health.

In general, in modern psychosomatic diseases, the propensity to disease and the factors that are resolved are distinguished and delay the development of the disease.

The impetuses for the development of such a disease are difficult life situations. If manifestations of neurotic or somatic diseases, then they develop on their own laws and which, however, are closely related to factors and the environment [84].

In any case, the diagnosis of psychosomatic and neurotic diseases requires an understanding of situational nature of its origin. The statement of the presence of psychosomatic disorders does not lead to denial of the main diagnosis. If to speak about psychosomatic, biopsychosocial diseases, this only indicates the connection propensity - the person - the situation. But the open question remains: is it possible to foresee (predict) human inclination to psychosomatic illnesses?

A person who is in harmonious relationships with his environment can carry extreme somatic and mental stresses, avoiding illness. However, in life there are personality problems that cause such a heavy fixation and mental disorder that in certain life situations lead to negative emotions and uncertainty in oneself. It is in difficult situations that psychosomatic patients exhibit emotional depression can not properly evaluate and describe their condition [100]. Thus, in the modern understanding of the pathogenesis of psychosomatic diseases, multifactorship is recognized in explaining the nature.

Value of somatic and mental, that is, the influence of predisposition and environment; the actual state of the environment and its subjective processing; physiological, psychological and social influences in their totality and complementarity - all this matters as interacting factors of psychosomatic diseases.

The center of the weight of psychosomatic suffering is always the organ, the most vulnerable and important for life is the activity of the organism in the individual's experience. "Choice of authority" indicates the predominant orientation of protective and adaptive mechanisms that cause the effect of damage as the disintegration grows in stressful situations. But which organ will be the most vulnerable in this situation? It remains unclear.

The initiative in choosing an organ always belongs to the cortical bonds that affect the emotional pectoral apparatus and program the degree of involvement of various organs in a stressful situation. What exactly effect arable path will turn out to be superior to the periphery of emotional excitement ultimately depends on the features of this emotion, on the human nervous constitution peculiarities and on the whole history of person's life. The issue of prognosing the possible damage to organs or organs in the development of psychosomatic disorders remains open.

Thus, to the most significant theoretical and methodological basis for prognosing the course of psychosomatic diseases, we address in the first section considers the issues associated with the analysis of theories and models of the psychosomatic diseases emergence and development, their classification, as well as the isolation of psychological and temporal preconditions for prognosing the these disorders course, as the key issue of determining the psychological indicators of psychosomatic disorders.

Classification of psychosomatic disorders and psychologist's portrait of a person with special needs

Psychosomatic disorders can be divided into several large groups. Symptoms are distinguished by the pathogenesis, the manifestation of the symptom and the functional structure of

the psychosomatic connection, which is reflected in the psychosomatic disorders:

1. Conversion symptoms. A person unknowingly exhibits painful symptoms, which are objectively absent. This is often observed when the neurotransmitter conflict receives a secondary somatic response in the form of a demonstration of symptoms as an attempt to resolve a social conflict. Convergent manifestations affect arbitrary motor and sensory organs (for example, hysterical paralysis, paresthesia ("crawling ants"), psychogenic blindness and deafness, psychogenic vomiting, pain phenomena).

2. Functional syndromes. This is a functional disorder of individual organs or systems. No pathophysiological changes in organs are detected. The patient has a motley picture of uncertain complaints that may affect the cardiovascular system, the gastrointestinal tract, the motor apparatus, the respiratory organs and the genitourinary system (for example, paresthesia, throat and unpleasant sensations in the area of the heart, neurocirculatory dystonia, functional disorders of the stomach, paroxysmal disorders of the cardiac rhythm of various genesis, etc). All this is accompanied by internal anxiety, depressive manifestations, symptoms of fear, sleep disturbance, loss of concentration and mental fatigue.

3. Psychosomatic illness in a more narrow sense. At the heart of them lies the primary bodily reaction to a conflict experience, which is accompanied by changes and pathological disorders in organs. Relevant tendency is to influence the choice of organ or system that is affected.

Historically, this class includes classical psychosomatic diseases "holy seven": bronchial asthma [J 45], ulcerative colitis [K 51], essential hypertension [I 10], neurodermatitis, rheumatoid arthritis, stomach ulcer [K 25] and the duodenum [K 26]. Currently, these diseases include - ischemic heart disease [I 20], functional

arrhythmia [I 49.1], thyrotoxicosis [E 05], type 2 diabetes [E 10], obesity [E 65], neurotic, stress-related, and somatoform disorders of behavior [E 40 -E 48], diseases of the genitourinary system [N 00 - 33] [174, p.112].

However, based on the concept of changes in the functional brain asymmetry, which is accompanied by a disorder of the functions of the physiologist of systems with temporal functional asymmetry, as the causes of psychosomatosis, it is proposed to add to the psychosomatic diseases also radiculitis and [M 54.1], migraine [G 43], constipation [K 59], irritable bowel syndrome [K 58], dyskinesia of the gall bladder [K 22.8], chronic pancreatitis [K 85], chronic cholecystitis [K 85], and functional diarrhea [K 59.1] [217]. Among the typical psychosomatic diseases, especially in the countries of North America and Western Europe, were nervous anorexia, nervous bulimia, cardiospasm and some forms of psychogenic obesity [174, p.132].

4. Psychosomatic disorders associated with the peculiarities of emotional and personal response and behavior - the propensity to trauma and other types of self-destructive behavior (alcoholism, drug addiction, tobacco smoking, overeating with obesity, etc.). These disorders are due to certain attitudes stemming from the characteristics of self-esteem and experiences, and lead to behavior that results in a health condition. For example, a tendency to injury is typical for individuals with properties that are opposite to accuracy, diligence. Increased consumption of food can be understood as an indicator of prestige, social position or substitute that compensates dissatisfaction.

Y. Gubachev [115], Y. Stavroskii and [117] distinguish a number of variants of the development of psychosomatic diseases, of which the following should be emphasized:

1. Situational (primary-psychogenic) variant - in the foreground among etiological factors there is such a long-term impact of psychologically

unfavorable living conditions that even the developed capabilities of the protective reserve (personal and biological) do not protect against the formation of organic pathology from various somatic systems.

2. Personal variant - the main condition for the formation of pathology is psychologically deformed personality, which determines the protracted, hypertrophied type of psychological response, the formation of chronic emotional stress. The latter option can be attributed to the development of the disease through certain pathological habits (overeating, alcoholism, etc), having a personal conditionality.

Thus, the term "psychogenic" can not be uniquely applied to psychosomatic illness. In psychosomatic diseases, the psychogenic factor takes place, but in a complex combination with physiological factors. Only a combination of personal characteristics with certain properties of somatic systems (constitution, heredity, age, sex, the nature of previous diseases and a certain defect of regulatory and executive mechanisms of the body) make it possible to restore one or another pathological structure, which we call psychosomatic illness.

Analysis of theories and models of psychosomatic disorders

There is a fairly large number of theories and models of psychosomatic diseases and methods for their classification. The scientific basis for further development of psychosomatic research was laid by Z. Freud [393, p.67], who created a *conversion model*, according to which the symptoms of a transient emotional cause are generated. Displaced from consciousness socially unacceptable instincts (aggressive, sexual), taking one or another symbolic form, generate psychosomatic symptoms.

From a historical point of view, the development of psychoanalysis can be considered one of the first signs of confrontation with the one-sided analytical development of medicine in the second half of the XIX century, a narrowly specific in-depth study of details and neglect of the basic

biological fact that the organism is a single whole and its functioning can be understood only from the point of view integral open system as a whole.

Being subjected to float ideas of Z Freud and U.Kenon, F.Aleksander together with his students developed the theory of "specific emotional conflict," laying the foundation of modern psychosomatic medicine [9]. A scientist, one of the first, began a thorough systematic study of psychosomatic relationships from a psychoanalytic point of view.

The function of the nervous system is explained by the scientist as aimed at preserving the conditions of the organism in a constant state (homeostasis). As we see, the scientist considers the work of the nervous system under the influence of the teachings of U. Kenon on homeostasis [460]. He points out that in the case of neurotic disorders vegetative functions interaction is disrupted and these disorders can acquire different forms.

Thus, according to the theory of "specific emotional conflict," physiological responses to emotional stimuli, both normal and pathological, depend on the nature of the emotional state. Vegetative responses to a variety of emotional stimuli also depend on the type of emotion. The author of the theory states that each emotional state is characterized by its physiological syndrome. For example, high blood pressure and increased heart rate - components of rage and fear. Stomach gastric secretion may, in the opinion of the author, be a regressive reaction to an emergency.

F. Alexander points out that the question remains open to the extent to which the physiological responses to various emotional stimuli are specific [9, p.161-162].

The scientist emphasized the multi-causality and situational variation of the ratio of psychological and non-psychological factors in the genesis of psychosomatic disorders. The psychologist noted that the etiological significance for the disease may be factors such as: hereditary

predisposition, maternity trauma, organic diseases of the early age, leading to increased sensitivity of certain organs, experience of negative experience in childhood in relation to bodily injury, peculiarities of early childhood education, experience negative emotional and traumatic experience, emotional climate in the family and characteristic personal characteristics of parents, recent bodily injuries, recent emotional experiences associated with intact personal, and professional relationships. Only in the analysis of all these categories and their interaction can be obtained a complete etiological picture [10].

The practical value of the research of F. Alexander is that if specific psychological features are characteristic of certain diseases, then this enables early diagnosis of somatic injury according to the psychological features of the patient.

At this time, the search for correlates between a specific emotional conflict and a somatic disorder continues.

Alexander F. One and first applied his scheme to explain a number of systemic diseases. Thus, hypertonic disease is considered as a consequence of a prolonged state of stress and readiness for action (and, hence, the activation of the sympathetic nervous system) when the inability of the action itself is possible. The dissatisfied need for protection leads, according to the scientist, to the activation of the parasympathetic nervous system and, as a result, to peptic ulcer [9, p.112].

At present, the pathogenesis of psychosomatic illness is not limited to simple linear dependencies, because the factors that are injuring the psyche are just one of the many factors involved in the mechanisms of distress. Modern researches prove that psychogenic factors are not the only circumstances on which the development of psychosomatic pathology depends, however, they are a significant factor associated with the development of this disorder.

By the theories of the direction also include: model abandonment of faith in the future J. Engel [480], the concept of loss of the object H. Frayberhera [487].

Characterologically oriented and temperamental theories of personality tried to predict the course of psychosomatic diseases.

In his work "Genesis of the personality" S.Maksimenko states that "the personality is a form of existence of the human psyche which is a whole, capable of self-development, self-determination, conscious subject matter and self-regulation, and has his subjective unique and innate inner world" [21 5, p. 40].

For the first time, Hippocrates, and later K.Galen, drew attention to this. They saw certain relationships between temperament and disease [108]. Historically, the main idea of Hippocrates about psychosomatic unity as the main factor of temperament was vulgarly distorted. It is said that Hippocrates supposedly divided people into four types of the predominant liquid in the body. In essence, Hippocrates, with his vast experience of observing patients, has identified four types of temperament for "prevailing" diseases. According to Hippocrates, choleric diseases have opposites to phlegmatic. That's why these types are opposite in the Hippocratic scheme. Further Hippocrates emphasizes that although sanguine has his own diseases, but according to the manifestation of the course they are close to the choleric. The course of diseases in melancholic diseases is similar to that of illness in phlegmatic patients. So a linear pattern of Hippocratic temperament patterns appeared. He believed that the typical "prevailing" diseases are due to the composition of the psyche of the individual. But, as a materialist in the outlook, Hippocrates said that the psychological composition of the individual depends on the predominance of one of the four substances (material basis) in the body. On the other hand, according to Hippocrates, the dominance of one of the four substances determines the "predominant" disease [108, p.45-46].

The content of the idea of the existence of four types of temperament with its "predominant" diseases is that the signs of a disease in the initial forms can be found in healthy individuals of these groups long before the manifestation of the disease in clinical form.

In medicine - the main field of applied human biology in the gradual eradication of infectious diseases increasingly becomes *constitutional theory*. Indeed, different constitutions and their varying resistance to the organism create only the basis for the development of certain diseases, if the individual falls into specific conditions. Properly recognizing different constitutional types and understanding their physiological and psychological differences, we can prevent certain diseases.

At the beginning of the twentieth century, the attention of researchers attracted the dependence of the manifestation of the properties of temperament from the structure of the body. One of the researchers who developed the constitutional theory of individual differences was the German physician E.Krechmer. In his book "The structure of the body and character," he tried to defend the idea that people with a certain type of body structure have appropriate mental characteristics and a tendency to specific mental illness [180]. The scientist identified four constitutional types:

1. Leptosomatics (leptos - dense, thin, soma - body).
2. Picnic (pyknos - thick).
3. Athletic (athlon - wrestling).
4. Displastic (dys - bad, plastos - formed).

Krechmer also identified another type of body structure, which he called "indefinite".

At first, it seemed that E.Krechmer implied the existence of two or three types of constitutions and distributed all people on this continuum [180, p.113-114]. But it turned out that the researcher reflects on what he is observing. In essence, it does not come from any scheme or system, but

from its ability to see morphology or physiognomy. The connection between body structure and some mental properties, and in the extreme case, with mental illnesses, Krechmer explained by the fact that both the type of body structure and nature have a common conditionality, namely, depend on the work of the endocrine system and the related with this chemical composition of blood, that is, it depends on the hormonal status.

E.Krechmer made an attempt to statistically measure the correlation between the constitution and the structure of the body, as he did it in relation to body structure and psychosis. Scientists also conducted studies to identify peculiarities of the pace, perception, motility, dexterity and emotional sensitivity through the application of psychological tests. He found statistical correlations that coincided with the description of these characters. Scientists have found correlations between the type of body structure and physiological functions, the response to pharmacological agents, found a relationship between body structure and somatic susceptibility to disease (for example, individuals with a leptosomatic structure of the body are susceptible to tuberculosis, picnics - to arthritis and diabetes) [180, p.213].

In addition, the scientist tried to explain the connections of all these factors in the context of genetics. So in front of him a picture of unity opens, that is, all phenomena from the field of psychopathology are united into one whole. Even the relative integrity of the individual, which is possible only in terms of psychology, is an element of this comprehensive, vivid integrity.

E.Krechmer tried to find some central factor on which one could construct a concept that would combine somatic and mental, healthy and sick; the concept of a unified and comprehensive constitution of a person who finds himself even in the most obscure features of character, as in all somatic functions. The author proposes the idea of the integrity of the constitution and its variations in the fundamental forms of human

manifestation. And so the focus is on the body structure. The body structure, in the opinion of the scientist, is an objective element in which everything is linked and with which everything else correlates. This representation corresponds to the original position of scientific anthropology, according to which the human constitution is manifested in its structure of the body [180, p.154].

The idea of the constitution was conceived by the scientist as something achievable and concrete. For example, character and psychosis have something in common with each other, the difference is only in the degree of manifestation (for example, psychotic negativism has something in common with stubbornness as a character feature). Psychosis also does not fall out of context as something completely new. According to E.Krechmer, these are only isolated nodal points, which are scattered in branched structures of normal somatic and characterological ties building a constitution. E. Kretschmer points out that there are many nuances and transitional forms that bind between illness and health [180, p.176]. On the opinion of the scientist, structure of the body, character, psychosis, predisposition to somatic diseases - these are only partial phenotypic manifestations of a holistic hereditary substance. He notes that the unity of this picture can not yet be demonstrated directly and deeply, but is used in order to use it to outline the reasons behind the occurrence of correlations. These causes are hidden in the combination of the genetic substance as the consequences of their mixing. So, in picnic's body, variants can exhibit themselves as elements that formally belong to the asthenic or athletic types. Mixing types is a "constitutional alloy". Under the "alloy" scientist implies both the psychic type of the individual and the totality of his hereditary inclinations. Alloys as individuals and in the family can be a blend of cyclothymic and schizotypic nature traits or vice versa; respectively, in the somatic sphere one manifests itself, whereas in the

psychic sphere, a completely different type of constitution does. Alloys of this type are called "crosses" by the scientist [180, p.165].

The theory of temperament was very popular, but soon busted, as attempts to recreate the results of the experiment did not give results, as in E. Kretschmer [448], [525].

E. Kretschmer was criticized for a fairly arbitrary division into types of body structure. Consequently, the researcher, according to other scientists, counts only the obvious integrity, types of body structure, characterological types, types of psychoses - but not simple, isolated signs that can be equally identified and counted by anyone. But statistics make sense and oblige something only if different scientists make the same conclusions on the same material. In other cases, the statistics may represent only the visibility of evidence and completely depend on the researcher's intuition [525, p.176] That is, according to opponents of E. Kretschmer, such calculations will be confirmed only in so-called "good cases", but there are other cases that do not even correspond to even the best intuition, as well as a large number of intermediate cases. In general, Kretzher's opponents still acknowledge that the positive value of the Kremcher's attempt (if not to take into account the typology of characters and physiognomy) is to establish a picnic type of body structure (two other types were known to him, although Eric Kretzmer described them much more in detail). Picnic type has a visual persuasion and is confirmed by concrete experience.

Eric Kretzher's approach proved his perspective, at least by the fact that he succeeded in developing a new theory that tried to transform the old one and replace it. The doctrine of the constitution entered a new phase thanks to the work of K. Conrad [467].

Concluding an analysis of theories about the constitution, one has to agree with the viewpoint that they relate to the leading directions of psychopathological sciences, the meaning of which goes far beyond their

scope. On the one hand, these trends are confirmed by a large number of works; on the other hand, the issues associated with them are not resolved at all, and any achievements in their framework, in the end, tend to be fruitless repetition of the same thing.

The system of B. Sheldon though resembled the system of E. Kretschmer, but originated from the well-known nowadays generally accepted assumption that there are no discrete types, but continuously distributed components of the structure of the body [525, p.123].

Most likely, in most cases, the body structure is a phenotypic expression of a gene complex that acts on the penetrance and expressiveness of some genes that predispose to certain diseases [398].

F. Danbar, having a long clinical experience with a psychiatrist (more than twenty years) in a general hospital, put forward the theory of "personality profile" [476]. F. Danbar noticed that in 80% of people who had repeated injuries, there is a specific personality profile, which she called "a person inclined to misfortune" and has a high probability of psychosomatic illness [476, p.125]. F. Danbar sees the main task of the patient's examination in identifying the conditions under which emotional stress becomes chronic and fixed. Emotional responses are regarded as derivatives of personality characteristics of patients [476, p.213].

In detail describing the personal characteristics of people with the disease of internal organs, F. Dunbar formulated the concept of "personal specificity" or "personal personal profile", specific to each psychosomatic illness. Thus, for example, according to this concept, the specific properties are characterized by such personal characteristics as suppressed propensity to self-sacrifice, the tendency to excessive dependence and excessive personal reaction to a psychological conflict. In his work "Psychosomatic diagnostics", written in 1948, Dunbar presents the psychosomatic history of the disease, with the obligatory clear comparison of medical data and the dates of events of the patient's personal life [476].

Dedicated by F. Dunbar personality types formed the basis of numerous further works that were associated with personal typology [7; 488; 506; 524; 530].

In modern medicine, the application of F. Dunbar's approach to psychosomatic diseases has led to the involvement of a large number of concepts of the typology of "personality traits" in people with psychosomatic disorders.

In the historical aspect, the significance of the theory of F. Dunbar is that it was for the first time designed for certain diseases of the type of personality, which combines somatic and mental. Subsequently, this theory has criticized the static nature of identifying certain features, and the inaccuracy of evaluations of retrospectively identified personality typologies.

Despite this, it must be admitted that the work of F. Dunbar largely determined the direction of many psychosomatic studies in the second half of the XX century - the specifics of the personality of the patient.

Modern researchers continued to search for personal profiles that are characteristic of individual psychosomatic diseases. The value of these works is different. The personal profile is established either by a clinical-anamnestic method - retrospectively - or by using various psychological methods, for example, personal questionnaires. Each of them has its advantages and disadvantages.

F. Alexander points out the progress of F. Dunbar in the study of typological peculiarities by the method of psychodynamic diagnostics, which in his "research profiles" describes certain statistical correlations between the disease and the type of personality. The scientist criticizes the study of F. Dunbar for a large variation between a particular disease and type of person, indicating that most of these correlations do not reflect actual causal relationships [10]. Alexander also criticized the clinic-anamnestic method, stating that "the clinic is able to provide successful

starting points, which, however, should be checked by other methods. It is easy to remove certain configurations from a multitude of psychological events and find each patient exactly the picture that he wants to see in him "[10, p. 57].

On the basis of the psychoanalytic concept of "intrapsychic conflict" F. Alexander [9] and the theory of "loss of significant objects" X. Freiburger [487] *developed a system-dynamic concept* [332], according to which for the development of psychosomatic disease the stages of socio-psycho and pathogenesis are necessary. Authors of the concept have noticed a certain predominance of stressors associated with death or illness with family and family problems. In the future, the stressor interacts with the psychophysiological features of the individual. The authors of this theory even found certain psychophysiological features that contribute to the emergence of psychosomatic disorders, in particular: weak or moderate weakness of the unbalanced type of the nervous system; high emotional and emotional instability; low activity and some advantage of inhibitory processes and high anxiety. Scientists believe that hereditary predisposition is also important for the development of psychosomatic disorders [332, p.84].

According to the authors, their concept takes into account all external and internal factors in the emergence of psychosomatic diseases. The psychotherapeutic approach based on this concept enables to positively influence the course of psychosomatic diseases, since it is aimed at the etiopathogenetic mechanisms of their appearance, opening new opportunities and perspectives in helping patients with psychosomatic pathology [332, p.176].

Consequently, psychosomatic medicine as a science requires further resolution, first of all those issues related to the mechanisms of the emergence of psychosomatic disorders, their timely prediction, as well as the provision of effective medical and psychological preventive care, which

will create conditions for preventing the aggravation of psychosomatic illness.

Many authors tend to abandon the search profile personality to replace this aspect of the research describing behaviors, according to the concept of R. Rosenman and M. Friedman [488, p.123-125], considering the infantile personality structure, peculiarities of self-esteem, motivational sphere, level of claims, early family socialization, peculiarities of the family structure of the psychosomatic patient. Some authors shift the emphasis from the internal to the patient's factors and factors of the environment on the characterization of a meaningful environment. Thus, G. Pollok, stops on the concept of "ultrasound mother", emphasizing non-analytical views on the existence of a pre-natal conflict with the mother [522, p.154]. With regard to specific conflict and life situations, their searches did not end with success. As Stocks points out, "it does not matter what a person is going through, it's much more important than how he transforms his experiences, so conflicts are not the same, but only the type and nature of their processing can reveal similarities, and only in this respect, and one could speak of their specificity" [363, p.70]. In general, scientists came to the conclusion that the problem of the psyche can not be studied separately from the problems of somatic, that is, they are united [1 2], [1 8], [26], [39], [42], [43, 266, 295, 46, 422, 489. One can not but agree with the opinion of R. Luria, who wrote: "There are not only psychic or only somatic diseases, but there is only a living process in a living organism; His vitality is precisely because he combines both the psychic and the somatic side of the disease. Not only rough but thinnest processes (such as water exchange, carbohydrates, electrolytes, heat regulation) are closely related to the mental state of humans and are regulated by the higher parts of the central nervous system, reflecting complex and multifaceted oscillations in it "[207, s.35-47].

Cortical diseases and direction (K. Bykov [75], I. Kurtsin [187]) are more monolithic than psychoanalytic directions, uses experiments, the results formulate, applying the neurophysiological terminology. This trend is more critical that to the generalization of data. But he does not penetrate into the field of interpersonal relations, social factors and emotional experiences. Some supporters of this trend, criticizing psychosomatic views, make demands that even in the field of human relationships, conflicts consistently applied neurophysiological concepts [117]. But such a requirement is met with great difficulty, both theoretical and methodical.

Experimental-psychological, clinical-physiological, biochemical and cytological studies of the effects of emotional stress, etc), which determine the influence of extreme stressful situations on the susceptibility and peculiarities of the pathogenesis, course and therapy of psychosomatic diseases, distinguish a very large number of individual directions of study of psychosomatic pathology (stress and adaptive reactions, stress and stress injuries, stress factors and a picture of their subjective experiences, etc).

The psychophysiological direction (F. Berezin [45], Y. Gubachev [115], P. Anokhin [22], K. Sudakov [372], etc), based on the desire to establish interrelationships between individual psycho- physiological characteristics (for example some neocortical-limbic char acrylics or sympathetic-parasympatheticotrophic manifestations) and the dynamics of visceral manifestations (activation of organ functions). The basic concept is the statement about the functional systems.

The psychoendocrine and psycho-immune research direction (Y. Tsimmerman [415] et al.) examines a wide range of neuroendocrine and neurohumoral phenomena in patients with psychosomatic illnesses (psychoendocrine testing of the specificity and level of synthesis of catecholamines, pituitary and thyroid hormones, specifics and imunograms).

Neurophysiological direction (I. Kurtsyn [187] P. Anokhin [22] V. Behteryev [53]), which studies of neurophysiology ensure stable pathological states and explains the origin of the dogs psychosomatic disorders relations. The essence of this theory is that the disorder of cortical functions is considered as a cause of the development of visceral pathology. It is taken into account that all internal organs have their "representation" in the cortex of the brain. The influence of the cerebral cortex on the internal organs is controlled by the limbic-reticular, autonomic and endocrine systems.

Within the "behavioral medicine" proposed model of pathogenesis based on "viseral training" and behavioral training, which explains the way of life of man and his personality (B. Karvasarskii [153]; Y. Hubachev [116]).

The theory of *disorder of the "functional asymmetry of the brain"* as a cause of psychosomatic pathology [331]. As social adaptation occurs an increase in functional asymmetry of the brain, which does not cross a certain limit - "critical zone". In the case of social maladaptation, the functional asymmetry of the brain reaches the "critical zone" and this leads to the emergence of psychosomatic pathology. The work of functionally asymmetric (with temporal asymmetry in secretory and motor activity) organism's physiological systems changes. This contributes to the output of the functional asymmetry of the brain from the "critical zone". At the same time, it is leads to the emergence of a phase of remission of psychosomatic pathology, which may have different course duration. There is a vicious circle of psychosomatic illness, which can be triggered both by changes in the central nervous system, and pathological disorders in the peripheral organs and systems involved in the pain process [331, p.56].

Thus, many of the various hypotheses were proposed to explain the etiology and pathogenesis of psychosomatosis: psychoanalytic,

psychodynamic, cortico-visceral, stress, socio-psychological, the theory of functional systems, and the theory of essential pathological conditions. However, none of them can provide a complete, exhaustive explanation of the diversity of psychosomatic disorders. Obviously, recently, a *multifactorial genome of psychosomatosis* has begun to be talked about, in which each of the hypothesized hypotheses explains one of the links in the pathogenesis of this disease.

It is known that many psychosomatic diseases may occur under acute or chronic stress, biological adaptation to which is severely delayed (I. Kurtsyn [187]). At the same time stress can always be conscious. Crucial in this case becomes "hidden internally accumulated" afferent impulses (I. Sechenov [331]) - endless trails of intellectual, affective and sensory stimuli, the general emotional background which is not always perceived by man.

At the same time, with the same force and severity of stress in some people there *are psychosomatic diseases, while others do not have them*. Moreover, the question of why mental trauma in some people causes the appearance of psychosomatosis in the cardiovascular system (ischemic heart disease, angina pectoris, myocardial infarction), in others - the gastrointestinal tract (peptic ulcer, syndrome of the excitatory colon, etc.), in the third one - the respiratory apparatus (bronchial asthma, hyperventilation syndrome, etc). These issues require a solution.

Perhaps some hereditary factors play a part in this process, including the presence of some kind of weakened, functional imperfection of those or other organs through which future psychosomatosis is realized.

Constitutional predisposition is usually evident in the critical period (e.g. during puberty or involution) or by genetic reflex and mechanisms. Under stress, as is known, there is a re-activation of repressed and repressed emotions and conflicts in the form of vegetative disorders, which are the initial stage of psychosomatosis.

Of great importance in recent times is the *factors predisposition* to psychosomatosis. These include, in particular, dramatic changes in life, various crisis situations (earthquakes, floods, etc.), which appear to be superfluous for the individual, the loss of relatives. As a moment that helps psychosomatic diseases, often a factor in prolonged nervous strain [118]. With great convincing evidence, this has been proven in the studies of hypertension in controllers of a number of large airports, whose work falls into the category of the most stressed [122].

In the formation of psychosomatic pathology, in addition to the factors of predisposition and provocative moments, great importance is given to *premorbid personality traits*. It should be noted that with a multitude of psychosomal pathologies, until now, failed to see the peculiarities of personality peculiarities characteristic only for this type of pathology, although attempts in this direction are being made [115]. Yes, the mandatory feature of this group of patients is anxiety, which patients are not able to express in words and thus get any relief. The inability to express in his words the form of his experiences was a name but *Alexithymia* [13]. The latter, according to the author, is inherited and largely determines the passive-protective style of behavior of patients in a stressful situation. Describe the features of personality, characteristic of a well-defined psychosomatic illness or a group of diseases. For example, such features as self-confidence, aggressiveness, intolerance, persistent lack of time, non-statutory struggle for maximum achievement in any activity, dedication to work, were characteristic of people at increased risk of coronary diseases, including myocardial infarction (so-called personality type A) [127]. At the same time, the issue of basic or basic emotion, which contributes to the development of psychosomatosis, remains open.

During the period of the creation of psychosomatic medicine as a science, which sought to overcome the gap between physical and

mental, a strict one-line model of psychosomatic illness was created. Subsequently, it was replaced by the idea of the possible occurrence of any disease in the interaction of both physical and psychosocial factors, which led to a *multifactorial open model of the disease*. Due to this circumstance, the *integral psychosomatic approach*, which takes into account the forms of the manifestation of psychosomatic diseases and allows them to be classified, came to the place of the problem of a narrow circle of psychosomatic disorders. Currently, psychosomatic medicine is increasingly gaining in importance from the idea of causality (multicase) of psychosomatic disorders. For explanation and interpretation of disorders physiological logic data is involved, "depsychologization" of research in psychosomatic medicine increased. However, despite the growing number of medical and biological works, psychological problems in this area do not become clearer.

The psychological and psychoanalytic interpretation of many subjects in these phenomena in psychosomatic medicine is also difficult to replace. This involves attempts to create integrative models of health and disease. They declare that all diseases have multifactorial genesis. Causal factors of the disease are in complex interaction and can be genetic, bacterial, immune, nutritional, psychological, predetermined behavior and social influences.

In recent years, the greatest popularity is the idea of the need to replace the problem of a narrow range of psychosomatic disorders, the problem of psychosomatic approach to any disease [84]. In broad sense, this approach, as D. Isaev [148] notes, addresses the problems of the internal picture of health and disease, conversion, somatogenous, somatoform and somatised mental and hypochondriacal disorders. This includes the reactions of the individual to the disease, dying, death, separation from the family, the problems of simulations of illness and artificial disorders, including Munchausen's syndromes [100] (simulation

of patients and illnesses that lead to surgery or other serious medical effects) and Polly [117] (Munchausen's provoked syndrome is an artificial disease of the child by his own mother or the person who cares for him).

One of the most debatable issues is the relationship between the nature of the mental stress factor and the lesion of a certain organ system, as we have already mentioned, speaking about the individuality of the physiological psychosomatic reaction within the norm. Mircea wondered if the lesion was due to any "*Locus minoris resistentiae*".

Possibilities of specific weakening and formation of such "*locus*" are sougChrT in the following conditions:

- a) an inherited constitutional inclination;
- b) a constitution formed in the prenatal period and in a state under the influence of psychic and somatic factors;
- c) organic lesions in later life;
- d) lesion of one organ, for example, infection;
- e) the fact that one body at the time of stress was in a state of activity;
- e) the symbolic meaning of the body in the individual psyche; for example, an individual reaction to the sensation of disgust with the germplasm of the stomach - symbolically: "I have a stomach turning away from this";
- g) organ fixation as a result of inhibited mental development; (for example, alcoholism as fixation at the level of oral pleasure - in the psychoanalytic sense).

But the issue of prognosing the manifestation of the "place of the least resistance" is due to the role of the brain, which, on the one hand, has the initiative to "choose the lesion of the body" [232], and on the other hand, the human brain plays the role of the individual's subjective clock [230]. The nature of the "reverse" of this clock is largely unclear and not studied. However, due to its "reversal" in the mind of the individual a real

"boom subjects ' subjective time", indicating its direction from the future through the present to the past [415, p.76].

Tracing exacerbation frequency psychosomatic diseases suggests that individual lives are a number of different age points to be critical [315]; accordingly decide on the duration of periods of convalescence (recovery) and remission (attenuation) disease in each individual patient, taking into account that the frequency of exacerbation of psychosomatic diseases fl ' connected with the bioenergetic processes in the body of the individual [416], which, in turn, is determined by the nature of subjective time flow [434]. Also, any bioenergetic cycle has the deployment on the "arrow of the internal time" of the body [416]. For the complete period the body undergoes a series of internal changes that lead to external changes physiological and psychological that lead to a disease.

Taking into account the individual characteristics of the dynamics of the experience of time and generalized profiles of individuals, we will try to determine the criteria of the typology of dominant psychosomatic illnesses.

2. Psychological and temporal preconditions for prognosing the course of psychosomatic disorders

We turned to the consideration of the issue of prognosing the manifestation of psychosomatic illness from the point of view of the psychology of time.

The problem of time was under the watchful eye of the inquisitive human mind throughout history. What is time? Does it exist objectively? To these questions, which constitute the main complexity of the problem, tried and sougChrT answers from representatives of various branches of knowledge.

Some thinkers left behind systems in which time was considered either as a thing in itself, or as a form of human reasoning. Others considered time as the basic form of moving matter, in which it exists, and recognizes itself in subject - man. According to some views, time as an object does not exist [410], but according to others, time as an object with certain physical properties is beyond the subject in the form of current changes in the external world [394]. These changes are perceived by the subject, and his psyche exists in the time that is displayed. But, on the one hand, attempts to allocate time as an object and describe its properties (flow, direction, irreversibility, division into the past, present and future) within the framework of physical laws not only proved to be unsuccessful, but also led the representatives of the physical sciences to the conclusion, that the explanation of the nature of time should be sought in the subject himself, in his mind, consciousness; on the other hand, the researchers failed to find a mechanism that transforms the physical time into a subjectively experienced [34]. Therefore, to come out of this uncertainty, some researchers began to argue that subjectively experiencing the time ("pure duration"), is not related to physical time and exists independently of the latter [35, p.113]. It is hardly correct to see in these conclusions the deliberate erection of the problem into known subjectivist approaches. On the contrary, it should be assumed that the problem of time, from the positions of which of scientific disciplines it was not considered, inevitably leads researchers to the fact that it is largely associated with the temporal properties of the person itself [34], [35], [40]. A similar concept, called relational, does not deny the objectivity of time, and is taken by an overwhelming majority of professionals involved in this problem all over the world [394], [235], [420], [434]. Hence the relevance of the study problems becomes equal with the study of the peculiarities of the subjective time experienced by man.

From the accumulated psychological science of the facts it follows that the human psyche exists in the past, and all mental processes include its metric and topological properties. Time is experienced by subjects objectively as flowing. About his course a person learns from his own experience. Time breaks into the past, experiencing the present and the expected future. The development of the human personality, the appearance, formation, destruction, disappearance has ontogenetic scan and relates to a number of critical points, turning points during the creative rises and falls [394].

Amount of time in the prospect of human behavior was studied by K. Levin [191]. He interpreted the clock perspective from the point of view of the "event concept of psychological time." According to K. Levine [191, p.198], a different time perspective of the person arises because time of different scale is given to the person by certain limits of the psychological field at the moment. Man not only sees his present, but always has certain expectations, that is, plans, hopes, fears, dreams of the future. At the same time, the timepiece The prospect also includes the psychological past of the person. That is why it is extremely important for determining the level of harassment, mood, manifestation of the initiative and the nature of the activity of the individual. K. Levin in his work "Theory of the psychological field" [191] noted that the psychological past, present and future are parts of the psychological field in the present, and that the time perspective is to include the future and the past, the real and ideal plan of life in the plan this moment These parts of the field, despite their chronological difference, are subjectively experienced as simultaneous and equally determine the behavior of man.

But theoretically, this approach has a significant limitation. The psychological time of K. Levine correlates with the phenomenal field of consciousness, and, at the same time, the past, present and future present in

it lose their qualitative certainty, dissolving in the "psychological field for the moment" [191, p.156].

K. Levin, one of the first among psychologists, built a *spatial-temporal model - the chronos*, in which the consciousness and behavior of the individual were considered through the prism of a long-term perspective and versatile characteristics of the individual living space. At the same time, in the course of time, he identified the zones of the present, the nearest and distant past and future, and in space - the levels of real and unreal (grounded in fantasies). In the process of ontogenesis, there is the dismemberment of the closest and distant zones of the past and the future, real and desired, but possible only in the imagination of the events of the past.

The ideas of K. Levine had a significant impact on the further development of research psychological time of personality.

But within psychological science there was no single theory of experiencing time. The multitude of accumulated facts is extremely disjointed. These facts are not consistent with each other, nor with the facts from other branches of knowledge, in which time is studied. This state of affairs is unlikely to be satisfactory. In addition, the need for a critical review of some of the provisions and approaches to the problem of subjective experience of time is over. Thus, in the framework of the *relational concept*, it was necessary to revise the question of *time perception in practice*. Adhering to the idea that time as a physical object is impossible to highlight, the question of his perception in psychology was formulated incorrectly. Therefore, the facts accumulated supposedly when studying the time perception, needed a new interpretation.

Equally significant drawback towards a unified theory of time that subjects experienced objectively was studied apart human way of life. S. Rubinstein [287, p.134-141] put forward the idea of a "way of life" and characterized it on the one hand as a whole, on the other - as a certain

number of certain stages, each of which can become "turning", that is, radically change life way of personality. According to the scientist, the way of life of the individual is structured into elementary units - events - "nodal moments and turning stages" [287, p.147-161]. One of the most important problems identified by S. Rubinstein is the problem of a subjective picture of the way of life, which is understood as a subjective image that reflects the spatial and temporal parameters of human life and personality, which regulates its activity as a subject of life.

B. Ananiev, dealing with the problem of the way of life of the individual, introduced the concept of "subjective picture of life", which was detailed and elaborated [20]. In his latest work, "Man and the World" [20, p.243], he views life as a way of human being in a philosophical sense, thereby expanding the concept of the life path of the individual and translating it into the plane of the problem of personal life.

K. Abulkhanova-Slavskaya, developing these ideas in her studies, developed one of the modern approaches to understanding the way of life of the individual - the concept of the personal organization of time and time of life, which considered the time perspective as "the way of life of the individual" [3, p.78- 95]. She tried to explain the nature of the psychological time, explaining it as the real time of mental processes, states and properties of the individual, in which they function and develop on the basis of reflected in the direct experience and conceptual understanding of the objective time relations between the events of life of different scales. Moreover, the biographical scale of psychological time corresponds to the time relations between the main events of the life path of the individual [3, p.156-167].

Age periodization is considered in the "objective biographical" time. But she is nothing that the time spent directly, the course of which is associated with the progress of the biological clock of the human body. The course of this clock (biological rhythms) is also studied separately,

therefore the rhythms of life have not been compared with their course either in the "objective biographical" time of human life or in the "psychological time of personality" [426, p.117-119].

The structure of temporal properties of a person is determined by the fact that it is based on the actual duration experienced. It is connected with the course of (biological) clocks of the individual and determines the features of his attitude to time [39 4, p.25]. Therefore, to create a coherent general psychological understanding of the temporal properties of man in the development of psychosomatic disorders, it was necessary first of all to consider the laws and mechanisms of individual time experienced in connection with these causes, which was the subject of a separate second study of the psychology of time.

Plato (262), Aristotle [28], G.Gegal [103], I.Kant [152], F. Engels [442] and other thinkers tried to explain the nature of time. The differences between these views were the subject of the research by Y. Askin [30], M. Kagan [150], Y. Molchanov [235], V. Yakovlev [446]. Most specialists (Y.Molchanov) dealing with the problem of time, recognize its objective nature [235]. However, attempts to describe the properties of time as an object (its course, direction, irreversibility, division into past, present and future) within the framework of physical laws did not lead to the desired results.

As it turned out, the laws of the classical (J.Lagranz) [502] and quantum (I.Prigozhin) [269] mechanics are indifferent to the direction of the flow of time. They can be called the laws describing the movement of bodies "in an untimely time" (D.Lighthill) [503]. Accepting Newtonian moving time, physics was powerless before the question: why is the time? (P. Davis, A. Chernin) [123, 423]. Assuming that the course of time coincides with the direction of the growth of entropy (L. Boltzmann) [60], and denoting it "the arrows of time" (A. Eddington) [432], physicists were difficult to explain the origin of "arrows

of time" (I. Prigozhin [269], A. Chernin [423]) In the language of physics it is impossible to explain the differences between the past, the present and the future (A. Chernin)[423, p.123]. According to P. Davis [123], I.Prygozhin [269], the reasons for the irreversibility of time should be sougChrT not in the physical world, but in the subject as an observer. An observer is needed to explain the "paradox of the clocks" and "arrows of time" (A. Eddington) [432]. As can be seen, physicists (P. Davis[123], I. Prigozhin [269]), faced with the difficulty of describing the time as an object, came to the conclusion that the problem of time is largely associated with the subject being recognized, because the explanation of the flow of time, its direction and irreversibility should be sougChrT in the properties of the human soul, mind, consciousness, as Descartes said [124], I. Kant [152], A. Berkson [42]. This conclusion is not unexpected, because time in physics was assumed, but not introduced on the basis of own research (M.Mamardashvili) [2 19]. The accumulated facts allow instead of the *substantive concept* of "man and nature to exist in time" to develop a new *relational concept* according to which "man and nature" possess "temporal properties" (Y.Molchanov [235], J. Frezer [489]).

Studies of the problem of time in psychological science show that time is a fundamental component of the entire reflective-behavioral interaction of man with the outside world, from sensations to personality (K. Abulkhanova-Slavskaya [3], N. Bagrov [35], I. Kon [172], G.Vudurov [97], E.Golovakha [111], L.Dragoli [132], V.Lisenkova [200], S.Rubinshtein [287], I.Sechenov [329], P.Fress [394]], D. Elkin [435]). In the mind of an individual, time breaks down into the past, present and future (Aristotle [28], G.Vudrow [97]) Subjectively, the time that passes through (Y.James [126], P.Fress [394]) in the direction of the future through the present in the past (N. Bragina, T. Dobrokhotova [6 6]) and does not depend on the physical time (A. Bergson) [4 2].

However, G.Vudrow [97] was the first who critically approached question of time perception. He drew attention to the fact that time is not a physical stimulus [97, p.87]. The same point of view is expressed by N.Bagrova [35], D.Krech [179], P.Fress [394], asking the question: "How is the time agreed in which there is a human psyche, eventually an object?" - could not find a mechanism for reconciliation and came, on the one hand, to the fact that the concept of time is the construction of human reason, and from another - that the basis of the experience of time lie internal changes associated with the mechanism of biological clock, unique for animals and humans. In the experimental approach, there was no clear definition of the act of time perception, and its duration was not directly determined (V. Wundt [98], G. Woodrow [97], W.James [126], P.Fress [394], D.Elkin [436]) Since time does not have objective reality, that is, it has no signs of an object opposed to the subject, then evolution did not create a special receptor for its perception (D.Elkin) [437]. And although the question of the time perception in psychology was formulated incorrectly, researchers have accumulated facts that allow us to talk about the reality of time experienced by man.

Based on the results of many studies, P.Fress [394], D.Elkin [436], S. Rubinstein [287] distinguished directly the time experienced by a person, and the indirect relation to it in the form of evaluations, judgments, representations and concepts. The course of the experienced time is laid down in the mechanism of the subjective (biological) clock (P.Fress [394], D.Elkin [437]), the course of which determines all internal (endogenous) changes in the human body (Y. Ashoff [34], E. Bunning [78], S. Shnol [430], A. Emma [441]). This clock is congenital and subordinate to the regulation of the central nervous system (A.Infri [388], L. Kuprianovich [188]), which is the main clock device (I. Pavlov [251], Y. Frolov [395]). In the experience of time, three time zones were discovered (D.Katz [496]), called short, neutral and long intervals. Many experiments

were conducted to study the duration thresholds, the psychophysical mechanisms of differentiation, the verification of Weber's law in these zones, the connection of neutral intervals with different physiological characteristics of the organism (M. Korzh [173], G. Woodrow [97], V. Sadov [173], M.Treisman [529], P.Fress [394], G.Shlotin [429], D.Elkin [436]) We studied the relation of duration of differential thresholds, flashing reflex, spontaneous eye movements, thresholds of discrimination, latent periods of reactions, cardiac contractions, respiratory cycles, arbitrary movements to the duration of short, neutral and long intervals (A. Bolotov [59], G.Vudrow [97], V. Lysenkova [200], I.Fress [394], B. Tsukanov [420], D.Elkin [437]). The indirect relation to the experience of time as well as the role of language in the formation of time events was studied in the works of L. Dragoli [132], P.Fress [394], D.Elkin [436], V.Yaroschuk [447].

The highest form of attitude to the experience of time is the system of representations and concepts, which are long formed. It allows a person, using time points, to transform the ranks of the temporal perspective, reconstruct the past, anticipate the future, go beyond the limits of individual experience and include himself in the history of mankind (P.Fress [394], I. Belyavsky [41], D.Elkin [437]). At the level of understanding time for an individual acts as a kind of "object" (Y.Kolomensky [171], I.Kon [172], P.Fress [394]). Fixed in the form of concepts, the time seems to be separated from the immediate changes that have changed and becomes "the psychological time of personality" (K. Abulkhanova-Slavskaya [3], E. Golovaha, A.Kronik [111]).

One of the difficult issues was the direction of the flow of time experienced. From the point of view of biophysics, the human body is a dissipative structure in which there is an "arrow of internal time" (I. Prigogine [269]), indicating the direction of change in the body from less probable states to more likely, from the past to the future. However, the

subjectively experienced time in the psyche of an individual flows from the future through the present in the past (A. Bergson [42], M. Bragina [66], T. Dobrokhotova [131], P.Fress [394]) Such a discrepancy between the direction of the "physical" time of the organism and the direction of time experienced, has not received an explanation. But the facts accumulated by psychologists allowed us to talk about the fact that along with the "arrows of the internal time" of the organism there is a real "arrows of subjective time", which indicates the direction of its flow from the future through the present in the past.

A special place on the "arrows of subjective time" is today. Aristotle believed that time exists in the present [28, p.133]. Augustine saw the relation of the present time to the truth of the world through the human soul. True is given as something existing, and from him the view is directed both in the past and in the future (S. Rubinstein) [287]. However, it is impossible to determine the limits of this self-observation (U.James) [126].

U. James believed that "true present" is a boundary mathematical line, which should not have thickness. However, A. Bergson [43], S. Rubinstein [287], A. Zharov [134], T. Dobrokhotova [131] and N. Bargin [67] believe that the present, which is subjectively experienced, should have a duration. But for some time there was no single definition and understanding of duration in general, and there was no it for the individual time of the subject (T. Dobrokhotova, M. Bragina, A. Zharov) [131,67,134]. The lack of a single definition and understanding of the duration of the present was a significant disadvantage in the psychology of time. The question of the size of the "real quantum" (Y.Golovakh, A.Kronik) [111] or the length of the "present day" (W. James) [126] remains open.

No satisfactory explanation has been found psychological relativity known to mankind long flow of time experienced by subjects objectively (P.Fress [394] F.Zavelsky [135], L.Kolomensky [171],

N.Chuprykova [426], D.Elkin [434] The psychological relativity of the flow of time (the time "runs", "flies", "flows") opens to the subject in adolescence as an indirect relation to the individual time being experienced (S. Rubinstein [287], P.Fress [394], D.Elkin [434]). The peculiarities of the time perspective are also revealed in adolescence and largely depend on and individual personality characteristics (P.Fress [394]). These ontogenic tumors, called the "psychological time of personality" (A. Bergson [42], Y. Golovakha [111], L. Kubitskene [184]), have an objective justification (S. Rubinstein [287]).

An overview of the different models of time mechanisms reflects the peculiar evolution of time perception studies [61; 162; 218; 263; 264]. Modeling the reflection of the time of the psyche began with the simplest psychophysical functions, after which appeared uncompromised models. Subsequently, multicomponent monocircular models were proposed: scalar and oscillatory model.

Despite the significant achievements gained in experimental studies in favor of each of these models, it still did not combine all the levels of reflection of the time mechanism of the individual. In addition, a number of recent phenomena described in the experience of time and processing of time information can not be explained by existing models.

As a continuation of the described tradition of modeling the time mechanism of an individual, O.Polunin [264] proposed a bicircular multi-oscillatory model. It covers three main levels of information processing: the level of disordered information in time, the level of labeling of elements from a plurality of information and the level of experience of time as a linearized singular flow. Significant differences of the proposed model from predecessor models are the conceptualization of the formation of time information, the introduction of labeling ideas at the expense of the bicircular mechanism and an explanation of the mineralization of the flow of information of monophonic attention, which forms the basis of the

singular linear flow of time at the level of experience and at the level of the concept of time within the actual paradigm.

The proposed model, as well as the understanding of the experience of time as occurring in the act of informational self-reflection of the cognitive system, opens a new perspective in the thesis advanced by Z. Kireyeva [160] regarding time as determinants of the development of consciousness. Perception of time in childhood at different levels of accuracy in the processing of time information reflects the various ability of the cognitive system to self-reflection and to learning from acts of its own reflection. The accuracy of self-reflection of the system is, from this point of view, in simple parameters, such as the accuracy of reproduction of time intervals and the coefficient of variation when reproducing a number of time intervals. These parameters are used by Z.Kireyeva [160] to reveal the comprehension of time in childhood.

The proposed thesis of B. Tsukanov about the connection of the accuracy of his subjective "clock" of an individual with a level of giftedness and intelligence level [420] acquires a new meaning. According to the proposed model, the accuracy of the individual "clock" of an individual should be understood as the accuracy and quality of the information display of the cognitive system, which becomes a guarantee of disclosure of the giftedness of the individual.

After researching proposed theories and models of experiencing time, it can be concluded that modern psychology represented a wide range of research time that because of the multiplicity of proposed theoretical and experimental development is difficult to imagine as a whole and clearly organize.

These studies can be considered from different points of view, mediated by a certain branch of psychology. Thus, age psychology studies the formation of representations of consistency, the formation of the category of sequence, the category of duration, the assimilation of the

concept of time and changes in the concepts of time at different stages of life; In general psychology, considerable attention is paid to experimental studies of time perception, cognitive peculiarities of processing of time information, clarification of patterns of reproduction, estimation, measurement and comparison of time intervals and modeling of these processes.

From the point of view of clinical psychology, interesting changes are the experiences of the time in the case of phobia, various types of depression, as well as loss of a sense of the flow of time in schizophrenia and changes in the time perception under the influence of psychotropic substances. With the advent of such new technologies of brain activity as MRI, TMS, and with the improvement of EEG and MEG screening methods in neuropsychology, the correlation of brain activity is intensively investigated, which accompanies the processing of time information in a time experience in the event of damage to certain brain regions and other phenomena, in particular slowing down or accelerating time.

No less interesting are attempts to simulate the time experience and the description of phenomenology within different psychotherapeutic approaches, for example, the idea of timelessness of the unconscious in psychoanalysis, a natural understanding of the time in behavioral psychotherapy.

At the same time, the theory of prognosing the course of psychosomatic diseases from the position of psychology of time has not been proposed by this time. It is on the substantiation of the concept of chronopsychological prediction of the course of diseases in psychosomatic patients and will focus our further research.

3. The basis of the chronopsychological prognosing of psychosomatic disorders in people with special needs

In a number of studies of the human way of life it has been shown that there is a clear age-periodization of the development of the psyche (B. Ananiev [20], D. Birren [456], G. Kostiuk [176], D. Elkin [434]). Periods are heterochronous and uneven. There are "turning points" (M. Pern, [261]) and certain rhythms (S. Rubinstein [287], A. Emme [441]). These facts are considered in the "objective biographical" time (B. Ananiev [20]), that is, in the directly experienced time of the individual's life, which is deducted from his biological clock.

Studies by G. Vudrow [97], D. Katz [496], T. Kolman [499], V. Lyzhnokov [200], P. Fress [394], G. Shlyakhtin [429], D. Elkin [434], B. Tsukanov [420] allowed to describe the nature and magnitude of the time error that arises as the difference between the given interval (t_0) and the subjective response of the subject (t_s). The data accumulated by different authors show that the magnitude and sign of the time error depend on the duration of the given interval (t_0) and on the applied method (reproduction, measurement, evaluation of duration). Yes, by the method of playing the duration of E. Gering [495] discovered three zones that became classic:

1) zone of short intervals $t_0 \leq 0,5$ s; 2) zone of neutral intervals $0,5$ s $\leq t_0 \leq 1,0$ s; 3) zone of long intervals $t_0 > 1,0$ s [495, p.321].

In the zone of short intervals, the relative time error $E \neq \text{const}$, and in the zone of long intervals $E = \text{const}$. According to G. Vudrow [97], the average error of reproduction of long intervals is 16 ~ 17%, according to T. Collman [499] - 15%, according to P. Fress [394] - 14-16%, according to B. Tsukanov - 15 ~ 16%, according to our research results $E = 16 \sim 17\%$. P. Fress notes that such a magnitude of the error of reproduction of duration appears not only in adults, but also in children, starting at the age of six [394].

Taking into account the fact that G. Woodrow [97] used intervals of up to 30 s, T. Colman [499] - up to 3 minutes, P. Fress [394] - up to 30s, and in B. Tsukanov's experiments [418] and our studies were gaps to 5s, and considers that the practical equality of error separated by several decades, we can say that by playing intervals investigated the mechanism of orientation of subject in the time, that determines *individual chronotype*.

A glance at time as a universal quantum of psychic activity was held not only by G. Hayssler, but also B. Tsukanov, who focused his attention on the substantiation and determination of the presence of a person's subjective time unit [4 17]. At the heart of the author's reasoning are two fundamental interrelated positions. The first is connected with the application of the proposed G. Erlendal relation, in which the efficiency of the reproduction method is determined as the result of the division of the reproduced interval of time to the proposed. In this case, if G. Erlendal considers the result of the proposed relation as a *dimensionless dimension* (which, from the standpoint of physics, is beyond doubt), B. Tsukanov offers evidence of the presence of a time dimension in this respect. In order to prove his hypothesis, the author outlines one more fundamental position of his concept. This is the application of the principle of "simultaneity" of Galileo-Newton, the essence of which is that "all events in the physical world, in all systems occur in the same, uniformly fluid time" [420, p.41].

This principle is indeed a consequence of the statement by I. Newton regarding the existence of absolute time, the course of which in this quality always remains the same. At the same time, B. Tsukanov considers in the procedure of memorization - the reproduction of the time of disorder of the given simultaneity due to the fact that the segments that are remembered and reproduced are arranged in successive sections of the "arrows of subjective time" and do not coincide [41 5, p.145].

The author further emphasizes that as a result of such a location, in the time perspective, the human perception that is perceived breaks down to a certain number of seconds and, as a result, loses its temporal dimension. With regard to this interpretation of the time intervals, it should be noted that B. Tsukanov in his judgments formed the outset, based on the imagination of I. Newton in relation to absolute time, comes to arguments to deny its basic property - the simultaneity of the fact that person treats it as the same time not for all events, but only for those that coincide in the "arrows" of subjective time [416, p.68-69].

At the same time, as the basic units of time, which, according to B. Tsukanov, the individual is guided, without a sufficient justification immediately marks the second, and at the same time it is allowed to count as a universal means of determining the time. Obviously, from the point of view of the provisions presented above, it is sufficiently clearly defined the limited explanatory possibilities of the concept of experiencing the time, its predominant use to describe the phenomena of arbitrary regulation of the time of action, which is performed mainly on the disjunctive level of mental activity. In this case, the mechanisms that implement the continuum-genetic type of relationship during the psychic process, completely remain aside from the regulation of activity [418, p.129].

Thus, the results obtained in B. Tsukanov's research reveal the specifics of a decision by an entity that has certain typological properties, a limited range of tasks associated with measurement, reproduction, and time intervals, rather than justifying any universal position in relation to the explanation of functioning psychological mechanisms of time regulation of activity.

Analyzing the magnitude and sign of the absolute (Δ) and the relative error (E) in the three classic time zones, one can not see that each subject has a boundary that plays the role of a particular boundary, on which the individual zone of neutral and the zone ends long intervals. This

space is an individual limit of comfortable durability. If in the experiment the interval from the zone of long intervals is set, the subject falls into a situation of intense waiting. The length of experience is divided into a number of individual segments, each of which is the limit of comfortable duration. Therefore, the subject reproduces the duration t_0 not specified in the waiting situation and the duration t_s . Difference between t_0 and t_s is recorded in the form of time error of the method. The magnitude of the error playback duration associated with a number of hidden delays and postponements [417]. The survived duration goes to the past in the form of discrete units of time. In the memory of the subject is fixed not the duration itself, but a certain number of individual units of time, which it decays in a situation of intense waiting.

According to the data of scientific literature [394; 425; 435], the type of subjective time perception or *time orientation* is one of the objective indicators of the dynamic properties of the psyche of the individual, reflecting the sequential process of change that occurs with a person throughout his life. Consequently, the changes occurring in the body of the individual, both psychic and somatic, are closely related to the time aspect.

Since in the zone of long intervals $E = \text{const}$, this can be explained by the fact that the method of reproduction is determined by the *rigid value*, both in the act of experience of the given interval, and in the act of its reproduction, which defines such a personality trait, as the *orientation of the individual at the time* and determined by the individual the ability to reproduce specified intervals of time.

In other words, the subject has an *individual chronotype* (ChrT), by which the measured duration is directly experienced. For the purpose of applying the chronotype of a patient to a psychosomatic illness, the relation is used: $\text{ChrT} = t_s / t_0$, proposed by G. Erlenvald [477]. The value of a chronotype is a *dimensionless*, but a constant indicator for an

individual, both in the process of experiencing a given interval of time, and in an act of its reproduction.

The psychological content of this relation is to explain the psychosomatic nature of the experience of a person of subjective time. The result of the proposed relationship shows that the duration of the human experience of the time is not homogeneous, not amorphous, but discrete.

On the other hand, in the proposed methodical reception the subject is not passive, he performs those or other external or internal actions. In these actions, he uses certain means. It faces a metric problem, which can not be performed without measure (measurement), and the hypothetical chronotype acts as a function of this degree.

In other words, the subject measures his duration as he measures the distance in steps. But for measuring it uses not external, but internal means, their subjective, namely, built-in "clock" [394].

At the same time, these clock are not the same, they are individual for an individual person [418]. The result of the proposed relationship explains how this clock works and works not only in the experience of duration, but also in the psychosomatic health of a person.

The chronotype of the individual acts as the central factor in the experience of the time man, which explains the frequency of manifestation of "prevailing" diseases in psychosomatic patients. Namely, in individuals with a certain chronotype, their "predominant" disease manifests itself with a certain "C-periodicity".

Considering the question of "prevailing" diseases [418], we proceeded from the well-known position that each individual, depending on belonging to one or another typological group, has "locus minoris resistentiae" in its body (the place of the least resistance). An analysis of the age of patients from the date of birth to the onset of the disease shows that the place of the least resistance is most vulnerable at the end of a prolonged large biological cycle or its long quarters. Following the "C-

periodicity" of diseases, it becomes possible to assert that in the life of an individual there are a number of separate age points that become critical. It is at these points that there is an exacerbation of psychosomatic illness. Logically, the question arises, why precisely at these points there is an exacerbation of "prevalent" diseases?

Explanation beginning of the "dominant" diseases, based on the proposed by B. Tsukanov cycloidal time experiencing model [418] associated with the concepts of the phase singularity (S. Shnol [430], I. Pryhozyn [269]). Under *phase singularity*, the fusion of the time phases of different cycles in separate points is understood (A. Unfri [389]). In accordance with the cycloid model (B. Tsukanov [418]), the phase singularity (FS) takes place at the points where the end of the previous large cycle merges with the beginning of the next cycle.

Using the transfer number in reverse order, it becomes possible to show that at five points of phase-singularities of a large cycle, the ends and start of all smaller and smaller periods of "sliding wheels" merge into respiratory cycles and "true real" cycles. As is clear, in a separate phase singularity, a large number of endpoints and beginnings of individual life cycles are compressed for a moment to incredibly small sizes. This is the main *threat of phase singularity*, since in the moment of change the body seems to be dying and born again.

Indeed, in many studies (A. Winfrey [389], B. Tsukanov [418]) it has been established that the cause of sudden stasis of respiration, fibrillation of the cardiac muscle, as a result of which a person dies, is a phase singularity. Stroke and infarction statistics (D. Elkin [434], B. Tsukanov [420]) convinces that the onset of the disease coincides with the phase singularity within the large, long biological cycle of the individual.

Phase singularity makes it possible to explain the turning point of the century, in which there are "psychological evil personality." In general, the

model of the "chronopsychological profile of the person" allows distinguishing the important role of phase singularities in the periodicity of the manifestation of psychosomatic diseases and the timeliness of their prediction.

However, we want to emphasize that the singularity of the flow of time at the level of its immediate experience does not exclude the frequency of the manifestation of psychosomatic diseases (aggravation, reconvalescence and remission).

The analysis of factors that predetermine the course of psychosomatic illness, gave grounds to be attributed to the most important prerequisites for prognosing the psychosomatic disorder of the differentiation of temporal characteristics in subjects with these disorders.

In connection ' connection with this, the key issues of chronopsychological psychosomatic illness prognosis was psychological separation-time indicators of these disorders, namely the expression of individual typological properties of the individual suffering from psychosomatic disease, chronopsychological continuum; differentiation of psychosomatic "risk factors" and analysis of psychosomatic aspects of pain as the most important symptom of the course of psychosomatic disorders.

"Chronotype" of the individual acts as a central factor in which it was possible to construct a concept that united somatic and mental, healthy and sick; the concept of prediction of the course of psychosomatic diseases.

The mechanism of detecting the time of acute development of disorders of the somatic field on the basis of individual-typological features of the subject determined further diagnostic, rehabilitation, profile active and prognostic measures.

Thus, the *chronotype* can be considered as an individual ability to reproduce the intervals of time, the index of differentiation of individual psychological properties of a person who can convince that the signs of

somatic disorders are consistent with him and, accordingly, can be sufficiently predicted and determined taking into account typological groups, as well as dependent from the individual psychotype.

Applying in practice the knowledge about the system of interdependencies and their correlation between individual-typological peculiarities, time characteristics, time factor, chronotype, psychotype and somatotype in subjects suffering from psychosomatic diseases are of fundamental importance during conducting of purposeful psychological-somatic influence, in the development of timely prediction of the disorder.

Analysis of factors that determine the course of psychosomatic illness, gave reason to attribute most preconditions prognosing abuse differentiation time characteristics in subjects with these disorders.

In our opinion, the method of determining the chronotype will solve a number of problems in the field of clinical psychology. In connection with this, the key issues chronopsychological prognosis psychosomatic illness was psychological separation-time indicators of these disorders, namely the expression of individual typological properties of the individual suffering from psychosomatic disease, chronopsychological continuum; differentiation of psychosomatic "risk factors" and analysis of psychosomatic aspects of pain as the most important symptom of the course of psychosomatic disorders.

Thus, the consideration given to them in the concept of individual peculiarities of the relation to time is extremely important for solving the problem of chronopsychological prediction of the course of psychosomatic diseases. These prerequisites, on the one hand, provide the opportunity to present as a single system all the variety of "external" and "internal" factors that influence the course of psychosomatic disorders, and on the other hand, - it is possible to more precisely determine the measures for chronopsychological prediction of the course of psychosomatic diseases in solving psychoprophylaxis problems of psychosomatic disorders.

This means that the consideration of the issue of the course of psychosomatic illnesses takes into account typological groups. Y. Polyakov writes that "different types of people prevail different diseases, the disease itself proceeds in different ways, differently undergoes the process of recovery, rehabilitation depending on the individual characteristics of the human psyche" [266, p.56-57]. As noted earlier, Hippocrates, positioning typological groups in a linear fashion, believed that choleric disease is completely opposed to phlegmatic. Sanguine suffer from the type of choleric, and melancholic is dominated by phlegmatic and choleric diseases. This order of location of typological groups, established by Hippocrates, is also related to psychosomatic illnesses [108, p.132-136]. The content of the idea of Hippocrates about the existence of typological groups with its "predominant" diseases is to the fact that the disease itself is localized in the group and beyond its limits. That is, a dominant disease is one of the objective indicators of the affiliation of an individual to a particular typological group.

Particular attention is paid to psychosomatic illnesses, as the development and course of such diseases has a time-wise scan, with periods of exacerbation and remission (attenuation) of the course. In studies of B. Tsukanov [4 19] we present results that convinces us that a dominant disease is localized within its typological group. The distribution of post-infarct patients gave a clear separation of the continuous spectrum of "τ-types" into typological groups [4, 21, p.94]. These findings of the study reflect how Hippocrates explained the origin of diseases in representatives of certain typological groups by the advantage of one of the four fluids in the body.

Thus, we approach the consideration of the issue of "psychosomatic illness" from the standpoint of the laws of experiencing time [420]. As for time, D.Elkin said: "The time perception, reflecting the objective reality, gives the person the opportunity to navigate in the external environment,

and gives an objectively correct belief about it" [43, 4, p.36]. Using the expression of Shahinian with regard to the fact that each individual has his subjective "little Chronos", B. Tsukanov added: "With its speed of time and with its time perspective" [416, p. 233] I. Pavlov considered the question of those processes that take place in the human brain in the conditions of perception of duration, speed and consistency, and concluded that the "measure of time" in the nervous system is a change in excitation of gastric maturation [251, p.381-382]. D.Elkin considered the dependence of the accuracy of the reproduction of the duration on the type of temperament [435, p.25-28]. He drew attention to some differences in the accuracy of reproducing the intervals of time in choleric, sanguine, melancholic, phlegmatic, but did not give a complete description of the attitude to the actual experience of time by representatives of these four typological groups. V. Bogazar wrote that every living individual has his subjective time, that is, sanguine - one, phlegmatic - another [58, p.109-111]. In his opinion, although these distinctions are small, yet complete coincidence does not exist at all. The writings of B.Tsukanov [416] scientifically proven that representatives of different typological groups are not only exposed to "different times", but there is a similarity of attitude to the experience of time in individuals who belong to the same typological group, indicating Nye ness generalized profiles that are comparable to the classical typology of temperaments. In general, he highlights and details the five types of profiles [415].

Each of the researchers of temperament (Hippocrates [108], G. Aisenk [7], I. Pavlov [252]), typological groups are in their order, which did not allow them to reconcile them with each other (Y. Strelau) [367]. Therefore, to determine the natural order in typological groups, *we propose to check the degree of expressiveness of such properties of temperament as "extraversion-introversion" in the spectrum of the chronotype of individuals suffering from psychosomatic illness.*

Such well-known time researchers as E. Holovakha, A. Kronik [111], P.Fress [394], D.Elkin [437] noted that humanity in the process of reproduction has kept itself within the stable boundaries of typological groups throughout all previous history. Therefore, individually predetermined features of the relation to time influenced the activity of subjects, their philosophical generalizations, political views, and poetry works. According to I. Bilyavsky [4 1, p.253], the analysis of such influences allows us to clearly reproduce the individual peculiarity of historical identities. P.Fress [394] stresses that conservative ideology was held by subjects with an orientation in the past, and the radical ones were those who turned to the future in the future. B. Tsukanov emphasizes that "the person builds his attitude to the time in the historical and even on a cosmic scale, taking into account in it and the time of life of his carrier - the individual" [4 1 6, p.176]. Therefore, the scientist comes to the conclusion that between the profile of the individually predetermined attitude to the time and time of the individual there is no linear connection. In order to master time, it is necessary, according to the expression of P.Fress, to achieve the "wisdom of the old" and take time as it is given to each of us - with its duration and lack and unreliability [394, p.45-46]. Taking into account the individual characteristics of the dynamics of the experience of time and generalized profiles of individuals, we will try to determine the criteria of the typology of dominant diseases. To do this, it is not necessary to answer the question: Is there a distinction between "risk factors" of psychosomatic illnesses?

Modern medicine also officially came to the recognition of the fact that all the causes of psychosomatic illness should be sought not in the external, but in the internal processes of the individual, taking into account the manifestation of the latter in the behavior of the individual [244].

So in medicine there was a doctrine of "risk factors", which mainly include constitutional and behavioral characteristics associated with the

type of individual [421]. Diseases of the type "psychosomatic diseases" include diseases of the liver, gall bladder, cardiovascular diseases, kidney and genital diseases, stomach and intestines, nervous system. According to the World Health Organization (WHO), the first place among the psychosomatic diseases takes cardiovascular disease (CVD). From CVD suffers $\frac{1}{4}$ adult population of the globe. It is the cause of every second death, every third disability [27] Therefore, the attention of doctors around the world is focused on the problem of cardiovascular disease. Together with psychologists, doctors are investigating the removal of "risk factors", which allegedly lead to cardiac catastrophes (myocardial infarction). Such "factors" is about thirty. Among them - constitutional (overweight, obesity), visceral (arterial hypertension), behavioral (smoking, competition, hasty) and typological differences (often concealed aggressiveness, increased or high anxiety) [268]. Despite the detailed study of "risk factors," the researchers came to the conclusion that they can only explain half of the cases of heart rhythm disorders [225], [244], [250], [255], [257], [266], [389].

Medics also know that in the nature of the human population with respect to the norm of blood pressure there are individuals with hypertonic and hypotonic tendencies [268, p.45]. Considering that every fourth adult inhabitant of the planet suffers from cardiovascular diseases, and "risk factors" give an explanation for the occurrence of the disease only in every eighth, you can try to check the location of such patients in typological groups. For this it is sufficient to use as an index of belonging to a typological group the individual temporal orientation of a person suffering from a psychosomatic illness.

Postinfarction patients should be localized according to their psychological properties within the two logical groups: moderately extroverted and moderately introverted. It is in the zones of localization of these individuals that there is an elevated and high level of anxiety.

Cardiovascular diseases are often accompanied by heart rhythm disorders. The psychological preconditions for the development of these disorders remain unclear. Particular attention deserves the study of personality traits of patients and the construction of a psychological portrait of patients with functional disorders of the heart rhythm.

From the point of view of medicine, cardiac rhythm disorders are a change in the normal frequency or heart rate rhythm, as well as the disorder of impulses, which manifests itself as a discontinuity in the distinct continuity of atrial and ventricular disturbances or the synchronization of their separate contractions [290]. In domestic and world medicine accepted distribution of arrhythmias on functional and organic. The first ones arise in people with a healthy heart, but under the influence of factors external to the heart, in particular psychoemotional and physical activity, alcohol, psychotropic substances, etc.; the second - during damage to the myocardium or valve apparatus, therefore complicate the underlying disease. The latter group includes arrhythmias associated with endogenous and exogenous intoxication, toxic effects of medicinal products (cardiac glycosides, adrenaline, anesthetics, etc.) [268].

Weakened rhythm associated with a disorder of autonomic regulation of the heart. That is why they are classified as somatoform vegetative dysfunctions and in the etiopathological category belong to the category of psychosomatic disorders. It should be noted that various cardiac rhythm disturbances are constantly recorded in almost healthy people. Such arrhythmias at a one-time examination are detected in a small percentage of cases (no more than 2%). However, during prolonged monitoring, those or other cardiac rhythm disorders can be detected in almost every third of the healthy subjects ($30 \pm 2-3\%$) [311]. In the last arrhythmia arise for a short period, mainly during physical, psychoemotional stresses, when a person feels accelerated or, conversely, slow heart beat. Such arrhythmias do not require medical intervention.

Instead, functional heart rhythm disturbances are said to occur when a person is "locked up" on an emotional experience for his or her heart due to the fear of developing a serious heart disease without any cause, and if necessary, to conduct regular medical examinations. Disorders of the specified rhythm thus take place for a sufficiently long time or are repeated periodically [291].

Non-harmful at the initial stages of functional heart rhythm disturbances, however, under the influence of mental stresses, can lead to the development of its severe diseases. Moreover, according to WHO, circulatory system diseases are ranked first in the structure of total mortality of the population of Ukraine. In addition, according to this indicator, Ukraine is in the first place among the countries of Europe with a percentage of circulatory system diseases with a total mortality of 62.2%, while in Europe this figure is 50.5% [27]. Therefore, the study of peculiarities of the personality of patients with functional disorders of the heart rhythm requires the timely acquisition of an prognosing development for correction of their behavior and emotional state. It is also required by doctors in the treatment and prevention of functional cardiac arrhythmias that are not related to its organic lesions and are psychogenic in nature. At the same time, according to observations, patients with functional cardiac arrhythmias, depending on the form, are characterized by manifestations of behavior. Thus, individuals who have functional rhythm disturbances accompanied by tachycardia, are persistent in their behavior, tend to assume responsibility for their actions, control events. They have little listening to the thoughts of others, in particular, of doctors, which is manifested in negativism. At the same time, most of these patients do not perceive their illness as a psychogenic, persistently seek help from doctors (say, the patient several times comes to the hospital and demands to start treatment), but at the end of treatment it is typical that they do not help and they even feel worse.

Patients in whom functional rhythm disturbances are accompanied by bradycardia are vulnerable and anxious, although they try to "suppress" it, "overcome it" in themselves, which confirms the presence of dysfunctional thoughts in such patients. Moreover, the expectation of sad events in the future, their extremely pessimistic interpretations, the negative opinion about themselves in stressful situations give rise to anxiety, despair in the positive decision of life's problems, distrust of others. On the other hand, there are controlling attempts, judgments such as "necessary", "necessary" and "traceable", indicating a large number of pronounced social stereotypes [292; 331].

Consequently, in patients with functional heart rhythm disorders, there is a conflict between the desire to be socially "correct" and taken by the surrounding, on the one hand, and distrust of the world and other people - on the other. This indicates the psychogenic nature of functional heart rhythm disorders.

If we compare the attitude to the time of individuals with different forms of arrhythmias, then it turns out that subjects *with a relative tachycardia* tend to re-evaluate and underestimate the proposed intervals of time. Subjects with *relative bradycardia* underestimate and re-measure the intervals of time. For comparison, we note that subjects with a *normal cardiac arrhythmia* (without rhythm disturbances) give approximately the same number of deviations as in the direction of re-measurement and underestimation, and in the direction of undervaluation and re-evaluation of intervals [314]. Thus, one can assume that there is a correlation between the chronotype and the heart rate, both in the direct and in the opposite order.

Modern medicine gives preference to the infectious factor in the occurrence of ulcerative processes in the stomach. That is, the HF factor is a stick that has an aphasia (the ability to penetrate into the cell), which determines the course of the relapse process. This way, the process of

chronicle of these diseases is explained. Among the aggressive factors that contribute to the diseases of the stomach, distinguish: hyperproduction of hydrochloric acid, the action of pepsin, impaired motor function of the stomach, the presence of nonsteroid and steroid hormones (corticosteroids), hyperproduction of bile. However, a critical analysis of these data shows that these risk factors can explain the cause of about half of the cases of the occurrence and development of stomach diseases in the human population. In 35% of the total number of individuals suffering from stomach diseases, there is the so-called asymptomatic form, which leads to the development of the ulcer, but is not accompanied by risk factors [27; 337]. Today, gastroenterologists do not know propedeutically who can have such a clinical form of stomach disease, such as gastritis or peptic ulcer disease.

The problem of stomach illness is still far from its final solution. One of the reasons for this is the inadequate study of two points relating to the very essence of the disease: firstly, stomach illness is a non-infectious process that affects 20% of the world's population; continue Secondly, they act as a chronic, i.e. their development and progression of a temporal organization, and their clinical forms such as gastritis and gastric ulcer, are at a certain age. Since the number of individuals suffering from stomach diseases in the human population, according to world statistics, remains relatively constant, it is likely to assume that there are individuals (or group of individuals) who "predominantly " suffer from the stomach [29 6; 339] If such people and groups of "surgeons" of gastric illness really exist, so-called risk factors of this disease in the initial forms can be easily detected in people of this psychotype long before their probable effect. Given the psychological characteristics of individual behavior in, we can assume that the chronotype of such patients, in which "dominated" diseases of the stomach, the worms wear in the range of very introverted individuals.

In particular, it has been established that a large group of chronic diseases are diseases of organs involved in the digestive process in the

gastrointestinal tract. First of all, it is about cholecystitis, pancreatitis and dyskinesia of the biliary tract. In medical practice, there is a tendency of individuals to disease of the gall bladder, pancreas and biliary tract, although the means to predict this or that disease still do not exist. There is agreement between the age of the individual and the period of manifestation of chronic liver and gall bladder disease in the extremities of patients with severe extraversion. Such individuals are characterized by high extraversion, stability, and excitation in them 2 times prevails over braking. In addition, they are purposeful and aggressive in behavior [300]. The results of the theoretical empirical studies of aggression make it possible to consider it as a reflection of the differentiation of "places of the least resistance" in individuals, taking into account the basic emotional color of their behavior (D.Elkin [434], B. Tsukanov [416], etc.). Individuals with such a chronotype come closer to the category of pronounced extroverts.

The indices of the chronotype, manifested by the pronounced re-measurement of time intervals suffering from chronic stomach diseases, are characterized by pronounced introversion and stability, high levels of excitation and inhibition, which balance each other, and mobility in is twice lower than that of other individuals' chronotypes [3 04]. That is why they are calm, productively working in a familiar situation, and typologically take them and they can be very introverted.

Thus, taking into account the psychological individual characteristics of each individual, predisposed to diseases of the gastrointestinal tract, it is possible to predict the place of his least resistance. At first, such individual nosological forms of the disease, such as gastritis, stomach ulcer and duodenal ulcer, cholecystitis, pancreatitis, dyskinesia of the biliary tract, constipation, emotional diarrhea.

Complex psycho-somatic examination requires patients with a nephrology profile in order to study their psychological and somatic status.

The research procedure should be aimed at revealing the relationship and interdependence of individual-typological peculiarities in subjects with somatic disturbances from time parameters (time characteristics, time factor, chronotype) and the correlation between them. For subjects with somatic disorders of the nephrology profile, a balanced level of excitation and inhibition is characteristic, that is, according to the indicators of extraversion - introversion and neuroticism - stability dominates among the other or ambiverty type of orientation. *Ambiverty type orientation* - is a kind of conditional critical point through which me Ms. Between two types of personality orientation: extrovert and introverted by him [302]. Thus, the proposed mechanism for determining the time of acute manifestation of nephrologic diseases or time "risk zones" will allow to develop a model of the schematic representation of time periods of the development of somatic disorders, that is, to imagine how the formation of psychosomatic disorders occurs at certain nodal points or points of *bifurcation*.

A survey of individuals suffering from various forms of nosology chronic psychosomatic diseases, will enable prediction of the distribution of psychological and clinical symptoms of these diseases in chronotypes and build "*psychological personality profile*" of patients. This will enable to distinguish the main psychological diagnostic criteria for the manifestation of each individual pathology and, taking into account them, develop appropriate medical and psychological rehabilitation measures to prevent the exacerbation of the chronic psychosomatic process [308].

Analyzing the localization of diseases within the four typological groups, one can not but express an admiration for the "Greek genius" of Hippocrates. Let's recall that "lola" is moisture produced by the liver, and it accumulates the gall bladder. It is these organs that are subject to chronic illness in individuals of the cholera group. "Sangwis" is a moisture that the

heart continually shifts. It was in the people of the sanguine group that the most severe myocardial infarctions were recorded.

Melancholy is black bile because it is mixed with blood. Hippocrates himself said that the melancholic is in the most disadvantaged position, because it suffers from diseases and choleric, sanguine, and phlegmatic. Yes, indeed, given the sensitivity of melancholic, one can agree with the fact that he "all hurts". But it is not for nothing that Hippocrates saw exactly the "black bile" of this type, because, along with heart attacks (which, by the way, more often small ones), a high jump of blood pressure leads to a rupture of the vessels of the brain called stroke [108].

"Phlegma" - a clear mucus, which is very much in the human stomach, so the stomach phlegmatic is the most vulnerable, and ulcers are very complex.

In the zone of "equilibrium" type, diseases of the kidneys and genitals are localized.

The above comparison fully confirms the profound truth of the legacy of Hippocrates. In each type, he saw the *psychosomatic unity with the "place of the least resistance"* (*locus minoris resistentiae*), which for each type is the most vulnerable at a certain age, due to the duration of the biological cycle of the individual's life.

It is interesting to compare the distribution of chronic diseases by typological groups with the ancient views of Tibetan medicine. Here is a poetic statement of these views, made by L. Alzoyeva [248]:

Our feelings build our health.

If you are afraid

You are preparing for kidney disease.

If you are angry

Your liver and gall bladder will suffer.

Sadness and shyness of the spirit are clouded

Disease heart and mind.

Pride, ignorance, passion, envy and malice -

These feelings (if you test them)

Strike you mercilessly.

Be a friend.

Become your best doctor.

Find the cause of your illness in yourself.

This poetic form reflects the differentiation of the places of the least resistance in individuals, taking into account the *basic emotional color* of their behavior. The central or leading emotional color is typical for representatives of different typological groups. Thus, malice and wrath prevail in individuals of a very extroverted group, which was noticed by Tibetan doctors as a sign of liver disease. "Compression of the spirit" as a special emotional state is characteristic of anxious people, and they are representatives of moderately extroverted and moderately introverted groups, in which heart disease appears. Sum, melancholy are characteristic for moderately introverted, which have strokes as weakening of the nervous system. Situational fear within the limits of behavior "here and now" takes place in "balanced" individuals. Moreover, this is not a fear of melancholic, which sometimes becomes a personality trait (cowardice), but a fear of "caution without cowardice". That is why the Tibetan doctors saw in the form of such a fear the cause of kidney disease, which can be confirmed by the differential method in the "ambiverted " individuals.

The comparison shows that the ancient teachings of Hippocrates and the ancient experience of Tibetan medicine recorded a clear localization of "prevailing" diseases in individuals for their belonging to their typological groups. And we must pay tribute to this experience, because it focuses on a special holistic vision of the psychosomatic unity of the organism and the human psyche.

At the same time, it should be noted that the affiliation of an individual to a typological group is naturally (congenital) due to affiliation. Knowing your affiliation is to know and the place of the least resistance in your body, which under certain conditions may become the most vulnerable. But does it mean the doom and fatal inevitability of the disease of the system, which is the place of the least resistance? Not at all, because knowledge of a weak place gives the key to the vague concept, which is called "healthy way of life." It is knowledge that gives an individual the opportunity to build an attitude toward his own organism in such a way as to prevent disturbances and fractures in the place of the least resistance. "Become a doctor yourself!" On the other hand, knowledge of the weakness of the body gives doctors the key to effective prevention and prevention of psychosomatic illness. Therefore, it should be emphasized that preservation of health is a task that can be successfully solved within the limits of common psychological and medical technologies, using the scientific achievements of medical psychology.

The medical practice of the author convinces that timely prevention of chronic psychosomatic illness twice a year (spring-autumn) with the use of worked out regimens of dispensary monitoring does not prevent the exacerbation of the disease in patients with chronic disorders. That is, in spite of the preventive measures carried out, people have an aggravation of the disease in different seasons. This means that these measures were not carried out in a timely manner due to the fact that medicine can not predict an aggravation of the chronic process. We find the explanation that in medical practice there is no principle of an individual approach in the treatment and prevention of the disease, which would require a comprehensive consideration of the psychological characteristics of each individual.

To solve this problem, it is necessary to return to the assessment of the duration of the C-period [416], namely the chronotype and the

periodicity of aggravation of the psychosomatic illness. For each group of patients, the average age from the date of birth to the beginning of the disease is measured at the value of the C-period and is translated into years. By law, the time spent by the subject, the C-period is determined by the formula:

$$C = 8,5 \text{ ChrT (years)},$$

where ChrT - the chronotype of the individual.

B. Ananiev emphasizes that these cycles and phases of development "are time characteristics" and can not be independent of the course of the central clock of the individual [20]. It was found that in individuals with a hypertensive tendency through periods $\text{Per} = 3$ there is a sharp jump of arterial pressure, which is appropriate to consider as a peculiar mark of the "end-to-start" moment of the multi-cycle cycle in time experienced by the subject.

If the life of an individual consists of cycles that change each other, then will not show itself the S-period in the course of psychosomatic illness.

Thus, the concept of "C-period" can be considered as a *psychological and temporal indicator of exacerbation of chronic psychosomatic illness*.

An analysis of the age of patients with somatic disorders from birth to exacerbation will allow you to track how to show yourself the "place of the least resistance" at the nodal points - *the bifurcation points of manifestation of "prevailing" disease*. Following the "C-periodicity" of illnesses, one can determine whether there are indeed a number of separate age points in the life of the individual that must be critical, and whether or not these points are marked by exacerbation of chronic psychosymptomy diseases; as well as determine the length of periods of reconvalescence (recovery) and remission (attenuation) of illness in each individual patient. And why is there an exacerbation of the disease? The answer to this question is found in the theory of experiencing time, which

explains that the nature of the temporal orientation of the subject is associated with bioenergetic processes in an individual's body, and any bioenergetic cycle has the development of an organism on the "arrow of the internal time" [416]. At the end of the period in the body undergoes a number of internal changes that lead to external changes of physiological and psychological nature. For most people with chronic psychosomatic illnesses, the aggravation of clinical manifestations of the disease not only coincides with the beginning of a quarter of the current cycles and with their completion, but also begin to be repeated with a periodicity of $\frac{1}{4} C$, $\frac{1}{2} C$, $\frac{3}{4} C$ depending on the affiliation with the typological group. The disease becomes chronic because it is not diagnosed in the early stages of ontogenesis.

Timely complex psychological and combined medical prophylaxis will create conditions for preventing its aggravation and help to stop the chronization of the pathological process itself.

Such differentiation is necessary both in medicine and in psychology, because it answers the question: who, when and in what form chronic noninfectious somatic, but also *neurotic, stress-related, and somatoform disorders* may occur.

The problem of adjacent neuropsychic disorders has undergone a well-known transformation from a narrowly clinical to a broad problem of studying the patterns of the formation of normal and abnormal individualities, that is, the problem of studying temperament, character and personality in general. The existing classification of adjacent forms of pathology for today is so fragmented and diverse that none of them can be the basis for a single taxonomy of all forms of adjacent states [31 3].

It should be noted that the time factor of related neuropsychiatric diseases has always been considered very roughly.

According to G. Ushakov, adjacent disorder has a fairly clear age-frequency [390]. Neurosis can not only result in a mental injury. Its

formation occurs when the mental trauma is preceded by the phenomena of over-stress, fatigue, and the exhaustion of the psyche.

In recent years, a number of studies have been conducted to prove that the same type of psychological trauma causes various forms of reactive states depending on the patient's individuality. In this case, the new circumstances attentize the nervous system, and then the slightest drive can lead to a neurosis, the content of which manifests a relationship with the previously experienced traumatic situation. In some trauma never leads to a reactive state, the other - the same injury in similar circumstances is it paranoia, the depression, the conversion hysteria, the obsessive-compulsive disorder, then finally somatoform dysfunction of the autonomic nervous systems or other variants of somatoform disorders.

For of neurosis necessary to the existing trauma was strong enough and caused dysfunction in the vegetative nervous system or the latest in a given individual was particularly vulnerable premorbid [85; 351].

O.Kerbikov stressed that the mental life of man is formed "... under the influence of the environment, gender, age and temperament" [158, p.122]. According to the author, the age of the subjects as the rigChrT lo, affects the degree of neurotic patients [158, p.145]. The average age at which pathological development for inhibited individuals has ended is 13.3 ± 1.4 years, for hysterics - 14.7 ± 1.9 years, for excitations - 22.1 ± 1.9 years [424]. In this case, the frequency and severity of reactions, as a rule, are greater than the older age of the subjects. Especially pronounced phenomena of accentuateness, and, consequently, the risk of occurrence of adjacent disorders occurring in the age after 21 years of age, and even more after 31 years, that is, *the time factor* significantly affects the emergence, formation and development of related neuropsychiatric diseases.

It has long been known that the innate mechanism of the central clock of the individual starts from the moment of birth and continuously measures the course of time experienced throughout his life. According to

P. Fress, the life of the individual from birth to death can be divided into a number of periods [394]. He also identified in individuals the turning points, that is, a certain age in which "psychological evil" occurs, and called them nodal points. Many researchers refer to the age-old periodization of human ontogenetic development and distinguish phases of somatic, sexual, neuro-psychological, intellectual maturation [394], [425], [434]. s and cycles and phases of development are time characteristics and can not be independent of the course of the central clock of the individual. The conception psychology ontogenetic development time heterogeneity described *cycloid model*.

Given that neurotic, stress-related, and somatoform disorders have age-frequency, one can distinguish the zone of localization of adjacent disorders in accordance with existing typological groups (and determine the time frame of their occurrence in terms of their specificity of the experienced time). Coming out of the cycloidal model of experience time it is clear that the beginning and end of a large biological cycle are spaced in size s (a large biological cycle), which, in turn, is divided into a quarter. The life of any person consists of several large biological cycles. But regardless of the number of large biological cycles a person is experiencing at this stage, his quarter is critical, the body is at a minimum of its capabilities, in recession, and any stressful situation, perhaps even insignificant, is a trigger for the development of adjacent disorders [421].

So, in terms of the psychology of time an opportunity to highlight the area of most acute manifestations of related neurotic disorders is calculated statistically for individuals whose chronotype is the most vulnerable to the emergence of neurotic, stress-related and somatoform disorders.

Using C-frequency, it is possible to accurately calculate the critical period when the nervous breakdown appears in acute form with the precision of the individual's subjective clock.

At the same time, it is possible to trace the differentiation of neurasthenic disorders in the nosological and forms in the typological group of the chronotype, which is necessary both in medicine and in psychology, because it answers the question: who and in what form may develop neurasthenic disorders.

Thus, the "chronotype" of the individual can act as the central factor on which one could construct a concept that would combine somatic and mental, healthy and sick; the concept of prediction of the course of psychosomatic diseases.

The mechanism of detecting the time of acute development of disorders of the somatic field on the basis of individual-typological features of the subject will determine further diagnostic, rehabilitation, prophylactic and prognostic measures.

Conclusions

The theoretical analysis of the problem of prognosing the course of psychosomatic disorders allowed to come to the following conclusions:

1. None of the existing psychosomatic astronauts can be the basis for the prediction of the course of psychosomatic illness, since it does not allow us to reliably explain all aspects of the etiology and the pathogenesis of these disorders.

2. Most works devoted to the study of psychosomatic relationships in diseases of the internal organs, for the most part, are not able to predict the course of these disorders. Therefore, in order to explain the mechanism of the formation of psychosomatic pathology, the search for a new psychologist is extremely important - time factors of pathogenesis.

3. In numeracy defined in this section, individual characteristics with respect to time are essential to solve the problem of chronopsychological prognosis of psychosomatic diseases. These prerequisites, on the one hand, provide the opportunity to present as a single system all the variety of

"external" and "internal" factors that influence the course of psychosomatic disorders, and on the other hand, - it is possible to more precisely determine the measures for chronopsychological prediction of the course of psychosomatic diseases in solving problems psychoprophylaxis of psychosomatic disorders.

4. *Chronotype* can be seen as an individual's ability to play intervals, the rate of differentiation of individual psychological properties of a person who is able to convince the signs somatic disorders consistent with it and, therefore, can be very predictable and defined on the basis of typological groups and depend on individual psychotype

8. The concept of "C-period" can be regarded as a psychological and temporal indicator of exacerbation of chronic psychosomatic illness. Timely complex psychological and combined medical prophylaxis will create conditions for preventing its aggravation and help to stop the chronization of the pathological process itself.

9. Relational to the onset of time was the basis for explaining the periodicity of the manifestation of psychosomatic illness, according to which man has its own temporal properties and the principle of objectivity - these properties are manifested in the duration that is really experienced. During a certain period in the human body there is a series of internal changes that lead to external changes in the physiological and psychological nature that determine the state of health as well as human illness. Investigations in this direction G.Vudrou, D.Katz, T. Kolman, V.Lysenkov, P.Fress, G.Shlakhtian, D.Elkin, B. Tsukanov allowed to describe the nature and magnitude of the time error that arises as a discrepancy between the given interval time (t_0) and the subjective response of the subject (t_s).

Taking into account the fact that G.Vudrow and P.Fress used intervals of up to 30 s, T. Kolman was up to 3 minutes, and in B. Tsukanov's experiments, and in our studies, there were intervals up to 5 s,

and to take into account, that the practical equality of error is separated by several decades, it can be said that the method of reproduction of the duration of the proposed intervals of time investigated the mechanism of direction of the subject for a time, that is, the *individual chronotype of the individual*.

Since in the zone of long intervals the value of the time error is unchanged, this can be explained by the fact that the method of reproduction of duration is determined by the constant value, both in the act of experience of the given interval, and in the act of its reproduction, which defines a personality trait such as the orientation of the individual (extraversion-ambiversion-introversion) and is determined by the individual ability to reproduce the proposed intervals of time.

C e means that the subject has an individual chronotype (X), by which the subjective time perception is measured.

10. The psychological content of this relation is to explain the psychosomatic nature of the experience of a person of subjective time. The result of the proposed relationship shows that the duration of the human experience of the time is not homogeneous, not amorphous, but discrete.

On the other hand, the subject is not passive, he performs those or other external or internal actions. In these actions, he uses certain means. It faces a metric problem, which can not be performed without measure (measurement), and the hypothetical chronotype acts as a function of this degree.

The subject measures his duration as he measures the distance in steps. But for measuring, he uses not external, but internal means, subjective, namely, inner "clock".

Explanation of the onset of "prevalent" diseases, based on the proposed cycloidal mode of life, experiences of time, is associated with representations of a particular phase. Under phase singularity is understood the merging of the time phases of different cycles at separate points.

According to the cycloid model, phase singularity occurs at the points where the end of the previous large cycle merges with the beginning of the next cycle.

11. Based on the model of cycloidal "sliding wheels" time experience, it was possible to explain the beginning of the manifestation of psychosomatic disorders. The cycloid arch reflects the full revolution of the "wheels" of the biological cycle. If the area under the arch provide the content of the bioenergetic potential of the individual, as suggested by Y. Krivonogov in his studies, then the beginning of psychosomatic diseases will coincide with the end of the biological cycle or with the end of its long quarter, that is, with separate age points of life in which the potential reaches a minimum. Using the gear ratio in reverse order in accordance with the cycloid model, it becomes possible to show that at five points of the phase singularities of a large cycle, the ends and start of all smaller and smaller periods of "sliding wheels" merge up to respiratory cycles and cycles of "true." As is clear, in a separate phase singularity, a large number of endpoints and beginnings of individual life cycles are compressed for a moment to incredibly small sizes. This is the main threat of phase singularity, since in the moment of change the body reaches its minimum of possibilities, and then restored again.

In general, the model of the "chronopsychological profile of the person" allows to distinguish the important role of phase singularities in the periodicity of the manifestation of psychosomatic diseases and the timeliness of their prediction.

12. The analysis of factors that predetermine the course of psychosomatic illness, gave reason to attribute to the most important prerequisites for prediction of psychosomatic disorder of differentiation of time characteristics in subjects with these disorders. In this regard, the key issues of the chronopsychological prediction of the course of psychosomatic illnesses were the identification of the psychological and

temporal indicators of these disorders, namely: the severity of the individual-typological properties of the person suffering from a psychosomatic illness in the chronopsychological continuum; differentiation of psychosomatic "risk factors" and analysis of psychosomatic aspects of pain as the most important symptom of the course of psychosomatic disorders.

Thus, the key issues identified in the section on the identification of psycho-temporal indicators of psychosomatic disorders and on the one hand, serve as a methodological basis for the development and practical implementation of a system of chronopsychological prediction of the course of these disorders in people with special needs, and on the other, outline concrete Directions of further study of unresolved issues in this area, necessitate their verification the most important criterion of truth - practice.

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