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Clinical and ethological characteristics of patients with paranoid schizophrenia at the outcome of the disease

The paper carried ethological study of the structure of non-verbal behavior of patients with paranoid schizophrenia in relation to the evolutionary strategy of human behavior. Material study of 100 patients. A relationship between the clinical types of defect states, behaviors, according to the four evolutionary models of human behavior (egoistic, altruistic, cooperative, agonist).

Keywords: schizophrenia, outcome, defect, ethology, behavior of patients.

Introduction. The use of ethological methods in psychiatry are increasingly important in the study of schizophrenia. Of great interest is the possible relationship between genetic and physiological bases of behavioral responses and mechanisms of pathogenesis of schizophrenia. Study the relationship of individual symptoms, syndromes, some forms of schizophrenia and ethology of behavior. Since the formation of catatonic syndrome is associated with "vital physiological response of the body, forming a phylogenetically ancient part of the repertoire of specific adaptation mechanisms" [2]. So "touch" emotional hunger in conjunction with the violation of an instinctive ability to recognize danger and respond flexibly and adaptively to environmental change shapes paranoiac symptoms or causes the shell to hide in his own "I" (autism) [7]. These violations of instinctive activity can lead to mental disorders, "the brain itself begins to fill the vacuum, having hallucinations," [7].

Sociobiological model of behavior says about human resource constraints and the adaptive capabilities of human beings in fast-paced environment, which contributes to failure of adaptation and mental disorders, respectively. [5] In connection with what the founder of ethology, Tinbergen [9] in his Nobel lecture emphasizes the importance of ethological approaches in the study of mental disorders in humans. The main tasks of ethological psychiatry [2,3,9] are - 1. study the types and structure of non-verbal behavior for the diagnosis and prognosis 2. identifying the causes of individual behavior, management behavior, and 3. study of the evolution of the pathological behavior in phylo-ontogenetic istoriogeneze.



The object of ethological studies [9,10] are as instinctive behaviors, as well as conditional reflex associated with the long process of learning (communication, social traditions, professional activity). Behavior is organized in a hierarchical manner, so that the system behavior [3] distinguish several levels of integration - it's elementary motor acts, postures and movements, sequences of related poses and movements, groups, represented by complexes of chains and operations. On the basis of these principles in its research Samokhvalov V.P. [10] developed a glossary of non-verbal human behavior, which includes the elementary units of behavior, both simple and complex systems.

In reducing the data from various researchers (Samokhvalov V.P., Korobov A.A., M.A. Derjaguin, Khrennikov O.V., Mayburd E., Fedorenko N.A., etc.) [10] isolated phenomena of behavior that is clearly correlated with the schizophrenic defect. These include the position of subordination in which the head down, hands wound up back, reducing shoulder posture of the embryo. It was found that patients with schizophrenia at least look into the eyes of the interlocutor, usually to the side, down significantly more often dominated by the proboscis and components half proboscis, open mouth with a shift in the direction of the lips, drooping mouth corners. With all the deficit symptoms of schizophrenia were observed, dull or leaden eyes, such components as a single "clawed foot", restriction of the brush, "the hand of an obstetrician." For simple and complex systems of behavior in schizophrenic patients, researchers noted the stereotyped activity stereotyped rocking (yaktatsii), stereotyped manipulation, stereotypes feet and posture, for example, people with schizophrenia, unlike healthy active gesticulating fingers, the so-called "playing with his fingers" [10].

In the future, conducting his research in the direction of sociobiology schizophrenia Gilburd O.A., Balashov P.P. [1] found that "schizophrenia is subject to typological quaternionic general evolutionary patterns of the quaternary structure of the system of mutual symbolic and semantic transcoding and broadcasting with the rules of universal grammar of the Quaternary." It was concluded that the polymorphism of schizophrenia is a layered, systematic and evidence of its integrity and unity of the nosology. So, spending, environmental sociobiological behavior analysis 88 patients with schizophrenia catatonic showed that the content of their nonverbal repertoire is translated into the semantics of agonal evolutionarily stable strategy of behavior, for 97 patients with simple schizophrenia was found that "the content of their nonverbal repertoire is translated into the semantics of selfish evolutionary stable strategy of behavior. " As a result of socio-biological-ethological analysis of the behavior of 295 patients with paranoid schizophrenia, it was concluded that the "evolutionary teleological raison d'etre of paranoid schizophrenia in the human community"



is the "conservation and presentation of semiotically gominizirovannoy altruistic evolutionarily stable strategy of behavior."

The purpose of this study was to examine the nonverbal behaviors of patients suffering from paranoid schizophrenia at the end of the disease.

The objectives of the study were: 1) to examine non-verbal behavior of patients with paranoid schizophrenia in the final state in accordance with the clinical types of defects. 2) Identify the relationship between evolutionary models of human behavior and the clinical picture of the initial states.

Materials and Methods. Using a glossary of non-verbal human behavior, we have examined 100 patients of psychiatric hospitals for over 10 years, suffering from paranoid schizophrenia and "recorded" the attending physician in the category of "chronically ill" and have a stable mental state more than 5 years, without the expressed productive symptoms. For statistical processing of the material used the program Statistica 6.0.

All patients were disabled 2 groups. No statement more than a year in hospital were 68 patients in this group of patients were completely lost social connections, housing. Among them there was the greatest number of disabled - this is 20 patients. In the medical-labor workshops are 25 patients, 34 patients, only occasionally involved in the work within the department, the rest of the day spent in inaction. Nine patients were not included in the occupational therapy due to severe defect and needed to monitor the behavior and compliance with sanitary requirements, the clinical picture in these patients were observed phenomenon of secondary catatonia. The clinical picture of this group of patients was diverse (dominated by the state and the residual apathy and abulia, hallucinatory-paranoid symptoms, psychopathic personality disorder, paraphrenic syndromes). Among the reasons for prolonged hospitalization was dominated by social issues - in 70.4% of cases, negative attitude to discharge (a type of endogenous dependent hospitalism) [4] - 16.4%, from 13.2% of patients discharged impeded mental state and the full disadaptation in society. Of the surveyed patients, 32 patients were discharged from hospital with a periodicity of 3-6 months to 1-2 weeks. In these cases, the patients remained intact social networks. But the relationship with his family were often formal, cold. Hospital discharge provoked doctors.

At hospital discharge in 90% of patients stopped taking medication, and in rare cases alcoholized, which contributed to the continuation of re-hospitalization and inpatient treatment. This group of patients differed little from the previous group. The only difference was that all patients in varying degrees, included in occupational therapy (within the department, medical-labor workshops, external objects, cleaning of territory, working in the kitchen, bakery, potato fields,



etc.). Only 10 patients in spite of the pronounced defect, were discharged for 2-6 months during the year from a psychiatric hospital. For these patients was characterized by the presence of strong social ties (hyper custody mothers, wives, daughters, sisters). The relationship of the type "mother-child relationship." Such patients are often helped at home on the farm (washing floors, dishes, taking out the trash, could make their own purchases, etc.), they were characterized protective adaptive response - "hiding under the care" [6]. Interestingly, when the death of "guardian", these patients quickly maladjusted and joined the first group of patients. The clinical picture is dominated by disorders apathy and abulia, asthenia, in 3 cases remained not expressed hallucinatory disorders.

The results. It was found four types of clinical conditions. All the data were reliable direct correlation (at $p < 0.05$). The first is characterized syndrome of apathy and abulia. This group accounts for 45% of patients. The clinic was determined in these cases emotional and volitional decline, impoverishment of the emotions, reduced volitional activity, extreme passivity, isolation, restriction of social contacts, and four patients had severe symptoms of asthenia. The behavior is dominated by the components of energy conservation: dull eyes, gipomimiya, facial expressions of indifference, stupidity, misunderstanding, lack of contact eyes, dirtiness of the body, unfixed hand gestures removal, stereotypy, which corresponds egoistic model of human behavior. According to Gilburdt [1], this model corresponds to a simple form of schizophrenia.

The second group of patients at the clinic found against apatoabulia, paranoid (30%) or hallucinatory inclusion (10%) as a residual (residual) symptoms. The behavior of dominant positions to Raden, the Pharaoh, Napoleon's opinion on the sides, compressed lips, asymmetry of the face, squinting eyes or stare into the face, hands fixation on his knee, thigh, gestures, treatment focus, increasing leverage. These behaviors are determined by "altruistic behavior strategy," and complies with the paranoid form of schizophrenia [1]. The third group (6%) patients revealed marked changes in the personal sphere, the clinical picture in these cases is determined by the psychopathic behavior in the form of motor excitation, disinhibition of instincts, ridiculous behavior, mannerisms, and corresponds to the "cooperative evolution strategy of human behavior." Such a strategy of behavior is typical for hebephrenic schizophrenia [1].

The fourth group (9%) is characterized by signs of catatonia secondary and paraphrenic symptoms. They are characterized by extreme autism, stereotypical, disruptiveness of speech, social and personal helplessness, combined with affective flashes, fragmentary hallucinations. The appearance and behavior of these patients presented with horizontal wrinkles on the forehead, grin, half grin, torso forward, chaotic movement of the territory, unblinking scrutiny, the lack of fixation,

chewing, proboscis, masklike face, grimaces suffering, smiles, playing with his fingers, stereotypes. These clinical and "ethological markers" corresponding to "agonistic strategy evolutionary model of human behavior" and the catatonic form of schizophrenia [1].

In general appearance of patients with the initial state of paranoid schizophrenia is very similar. Are typical gestures, postures, subordination, oppression, look closer, dim-flashing is not directed at his companion (down, sideways) in mimicry of the lips released proboscis extension of the lower lip forward, there is a minimal fix hands. Motility of the head is characterized by rocking movements of the sternocleidomastoid and immobility in the torso, shoulders, pronounced stereotypy, especially stereotyped rocking and "playing with your fingers." At the same time grooming (preening) are rare.

Talk. The results of these studies suggest that paranoid schizophrenia at the end of the disease can be represented by all four evolutionary models of human behavior (selfish, altruistic, cooperative, agonist), each of which is characteristic of the behavior of the main forms of schizophrenia patients [1]. These clinical observations and ethological analysis of the behavior of patients suggest the unity of the pathogenesis, genetic conditionality of some form of schizophrenia. But this statement does not reveal the etiology of schizophrenia, only helps to understand the external manifestations and pathogenesis, confirming the concept of nosological unity of schizophrenia, its forms, options and allow the formation of adequate therapy and rehabilitation programs.

Conclusions:

1. Schizophrenia is a common nosology, regardless of the shape and course of illness.
2. Among patients with long-term clinical course of paranoid schizophrenia on the background of continuous use of antipsychotics separated defect apatoabulia. In this regard, for patients with initial-state energy-saving strategy dominated behavior.
3. Depending on the clinical picture of the defect, paranoid schizophrenia is represented by all four models of human behavior (selfish, altruistic, cooperative, agonist)
4. A proper understanding of nonverbal signs will not only adequate interpretation, but will also promote the "appropriate use of their own pantomimic opportunity" to increase "social competence of patients and building their adaptive behavior" [8].

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